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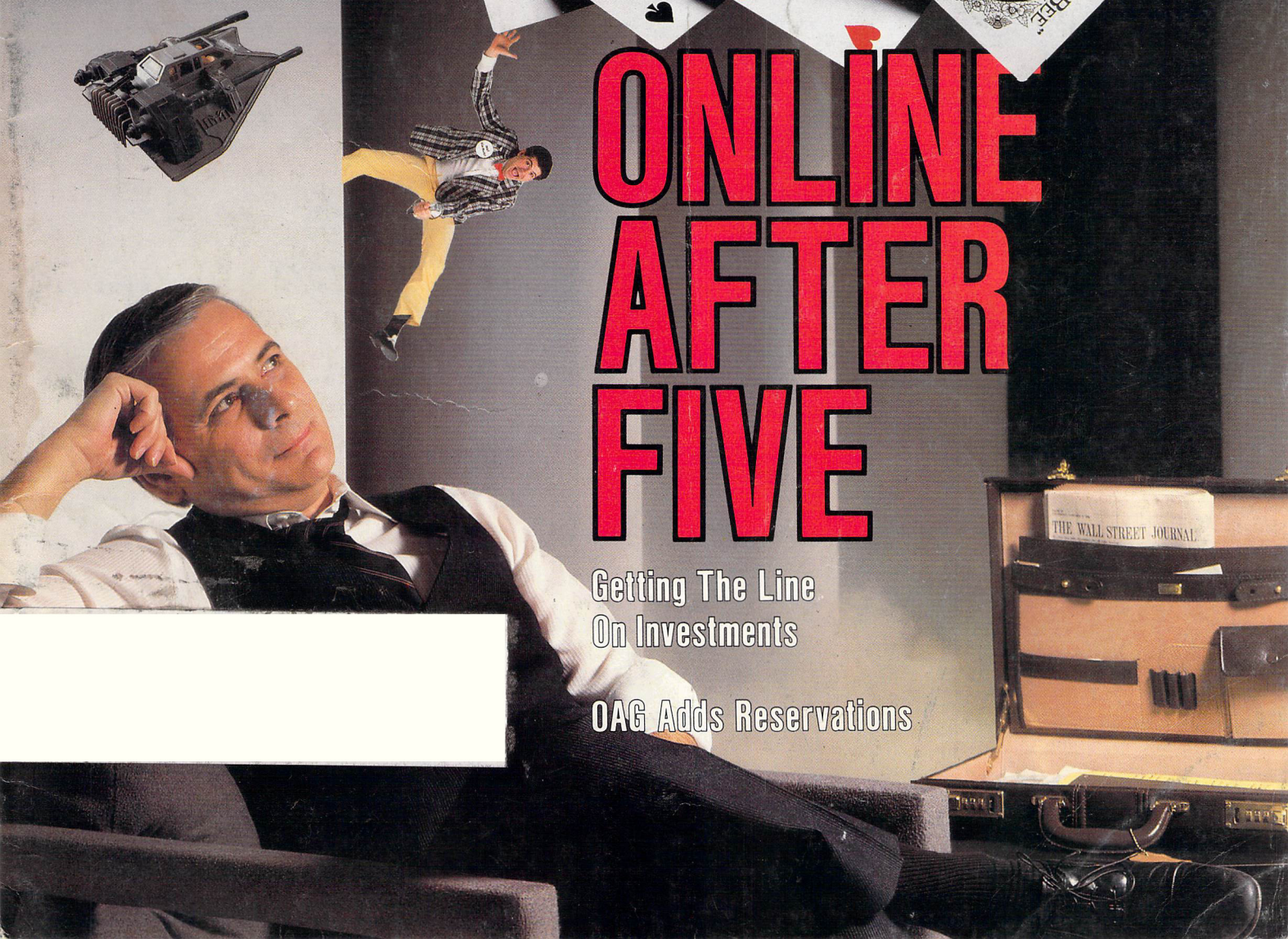
# ONLINE

T O D A Y

THE COMPUTER COMMUNICATIONS MAGAZINE

February, 1986

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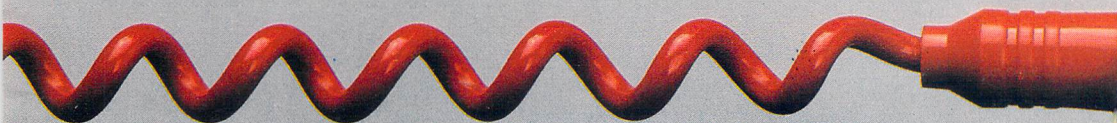
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# C O N T E N T S

## F E A T U R E

### 12 **Online After Five**

When the work day is over, professionals may choose to unwind by accessing online entertainment, ranging from trivia challenges to adventure and role-playing games.

## B U S I N E S S

### 23 **Behind the Scenes At Disclosure**

By understanding how and when Disclosure Inc. receives records on companies, investors can learn how to get the most out of the Disclosure II database.

### 24 **Micro 10K Plus Assists Investors**

Compiling information on corporations and investments will soon be faster and easier with the addition of a sophisticated screening and reporting program on CompuServe.

### 26 **Huttonline: A Direct Line On Investments**

Through E.F. Hutton's service, even those with small investments have access to information once restricted to institutions and professional investors.

## U P D A T E

### 28 **OAG Adds Reservations**

The Official Airline Guide now has online reservation and ticketing capabilities as well as hotel information in its total travel planning system.

### 29 **Forum Offers Logo In Many Tongues**

Foreign language versions of Logo, Logo adventure games and word processing are among the offerings in the Logo Forum on CompuServe.

## R E V I E W S

### 44 **Hardware**

**Asher** integrated system from Quadram Communications Group  
**All-Purpose Terminal** from RCA

### 48 **Software**

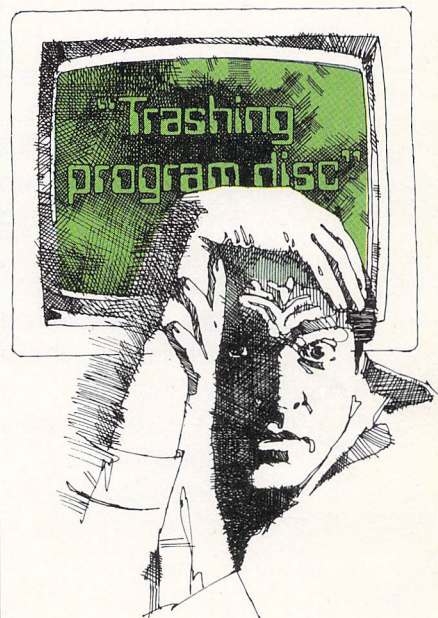
**MacOneWrite** cash disbursements module from Sierra On-Line  
**Insight2** expert system from Level Five Research Inc.  
**Memory Minder** analyzer from J&M Systems Ltd.  
**TelePaint 2.0** graphics package from LCS Telegraphics

### 54 **Books**

**Videotex/Teletext: Principles and Practices** — McGraw-Hill  
**Personal Computer Programming Encyclopedia** — McGraw-Hill  
**Buyer's Guide to Modems & Communications Software** — Tab Books  
**Tools For Thought** — Simon & Schuster  
**Up and Running: Adventures of Software Entrepreneurs** — Ashton-Tate

## D E P A R T M E N T S

- 3 Dear Reader
- 6 Letters to the Editor
- 8 Monitor
- 20 Beginner's Corner With Alex Krislov
- 34 Inside The Electronic Mall
- 35 Highlights Subject Index
- 58 Industry Watch
- 61 Shopper's Guide
- 64 Online With Charles Bowen



# D E A R R E A D E R

**Online Today™, February 1986**

Volume 5 Number 2

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Dear Reader,

In our last issue about games in 1983, we pointed out in this column that CompuServe's online games, while interactive, were all of the "tabular space war variety." We also pointed out that the potential for multi-player game technology held much promise, both for the appeal of the games themselves and for new uses beyond the boundaries of play.

To use the words of an old CompuServe advertising slogan: welcome to someday. In 1986, CompuServe offers interaction, graphics and variety in more than 40 online games and puzzles. Some of these games, such as Hallmark's *You Guessed It!* videotex "TV gameshow" are extraordinarily sophisticated and offer players prizewinning stakes. Other interactive games are breaking from the galactic cowboy genre to offer more peaceloving pursuits. The object of a new game, *Air Traffic Controller*, is to safely guide aircraft by cooperating with other "controllers" in the game.

This month, *Online Today's* "Beginner's Corner" columnist Alex Krislov takes a look at the present and future of online games in "Online After Five," starting on page 12. On page 16, you'll find a complete guide (current as of this printing) to all online games on CompuServe. Also, you'll get to meet some of the creators of your favorite games to get their thoughts and perspectives about online gaming. Loosen that collar, sit back, and enjoy.

\* \* \*

We'd like to remind you that there's more to your *Online Today* subscription than meets the eye. Don't forget to check into *Online Today Electronic Edition* on the CompuServe Information Service. Some readers have the mistaken impression that the *Electronic Edition* is a copy of the printed version. Not so!

In the *Electronic Edition* you'll find daily updates on computer and information industry news, news about CompuServe, reviews and much, much more. You'll find information in sections such as the Computer Legislation Database that would cost you far more than standard connect time anywhere else. The *Electronic Edition* is a fantastic value, and what's more, you don't need to burn up connect time to find out what's in it. Simply turn to page 4 of this issue and discover for yourself. Then, get online and GO OLT.

Douglas G. Branstetter  
Editor

# C O N T E N T S

## E L E C T R O N I C E D I T I O N

*Online Today Electronic Edition* provides daily-updated computer and information industry news, coverage of CompuServe services, commentary, computer product reviews and more. To access the *Electronic Edition*, enter GO OLT at any CompuServe prompt. Once inside OLT, simply enter GO and the page number (e.g., GO 90) to navigate the database. Following is a list of key pages in OLT to help you directly access the information you want without using menus:

### DAILY HEADLINES

**GO OLT** A GO-page directory of the day's top computer industry news and a summary of key OLT page numbers.

### DAILY NEWS

- OLT-160** **The Monitor Daily News** main menu. Lists all Monitor news departments.
- OLT-90** **Today's computer and information industry news.** Updated at least three times daily, seven days a week, including holidays.
- OLT-20** **The current week's Monitor news,** displayed on a five-day plus weekend menu.
- OLT-130** **Behind the Screens<sup>SM</sup>.** A column of computer and information industry news, rumor and gossip. Updated daily.

### COMPUERVE UPDATE

- OLT-50** **CompuServe Update** main menu. Lists all CompuServe news departments.
- OLT-70** **What's News on CompuServe.** A list of the current week's new products and services on CompuServe. For a month backlog of What's New columns, enter GO NEW and choose "Previous Weeks" from the menu.
- OLT-80** **CompuServe Community News.** CompuServe's daily updated "local news" of people and events on the Information Service.

**OLT-120** **Forum Conference Schedules.** A complete listing of all forum (special interest group) live conference activity. The list includes dates and times of special event conferences as well as regularly scheduled live conferences.

### COMMENTARY

- OLT-130** **Behind the Screens<sup>SM</sup>.** A column of computer and information industry news, rumor and gossip. Updated daily.
- OLT-140** **Beginner's Corner** column for new CompuServe Users. The columns contain instructions and helpful hints on how to get the most for your connect time dollar.
- OLT-3500** **Online With Charles Bowen.** A column of insights into online computing, written by the co-author of *How to Get the Most Out of CompuServe*.
- OLT-1000** **Computer Events Calendar.** A comprehensive weekly listing of major computer and information industry conventions, conferences, seminars and other events. Updated every Sunday.
- OLT-2000** **OLT Special Reports.** A database of analytical news articles on events of major significance in the computer and information industries.
- OLT-3000** **Computer Legislation Database.** A complete listing of all federal legislation affecting the computer and information industry and users of its products and services. The database tracks legislation in the House, Senate and President's Desk through passage to Public Law. This database is updated as required by movement or death of a piece of legislation.

### LETTERS TO THE EDITOR

- OLT-30** **Letters to the Editor** main menu. Lists all departments.
- OLT-31** **Send a letter instructions.** Complete instructions on how to send a letter to the editor via the electronic service.
- OLT-32** **Read letters** from other OLT readers.

**OLT-33** **Send a letter** to the editor. You will receive prompts for each step in the process. Important Note: We cannot answer questions regarding the CompuServe Information Service through this service. If you have questions or problems, please use the Feedback service (GO FEEDBACK) or the Online Computer Report Forum (GO RADIO). Also: this service does not have automatic wrap — please enter a carriage return after every 80 characters while composing your letter. Failure to do so will result in truncation of your letter.

### REVIEWS

- OLT-200** **Electronic Edition Reviews** main menu. Lists all departments in the Reviews Section of OLT.
- OLT-220** **Hardware Reviews** main menu. Six months library of reviews.
- OLT-3820** **Hardware Reviews for February.**  
**ENIGMA RESEARCH GIVES BUSINESS PC KEYBOARDS A FACE-LIFTING Manufacturer**  
 Enigma Research Computers  
 IBM PC, PC-XT and computers having plug-compatible keyboards; available for IBM PC-AT; adapters for selected computers having keyboards not plug-compatible.  
**MASTERPIECE PLUS GUARDS AGAINST NOISE AND VOLTAGE SPIKES Manufacturer**  
 Kensington Microware, Ltd.  
 Computer  
 Works with any standard computer system.  
 Operating System  
 Not applicable.
- OLT-3830** **Software Reviews for February.**  
**HOMEBASE TAKES A DIFFERENT APPROACH TO MEMORY-RESIDENT TOOLS Manufacturer**  
 Amber Systems, Inc.  
 Computers  
 IBM PC, PC-XT and compatibles.  
 Operating Systems  
 PC-DOS or MS-DOS version 2.0 or higher.

# C O N T E N T S

## E L E C T R O N I C E D I T I O N

### CONCURRENT PC DOS 4.1 IS A SUPERIOR OPERATING SYSTEM

#### Manufacturer

Digital Research, Inc.

#### Computers

IBM PC, PC-XT, PC-AT, AT&T 6300, and some compatibles.

#### Operating Systems

Concurrent PC DOS is its own operating system, but may be run from PC-DOS hard-disk partition.

### PRO-NT0 IS A SUPERIOR DESKTOP MANAGER FOR THE TRS-80

#### Manufacturer

Misosys, Inc.

#### Computers

TRS-80 Model 4/4p with TRSDOS 6.2, MAX-80 with MAXDOS 6, TRS-80 Models 2/12/16 with LS-DOS.

### HOME CONNECTION COMMUNICATIONS PACKAGE FOR THE APPLE II

#### Manufacturer

Penguin Software

#### Computers

Apple II, IIe, IIc and compatible computers.

#### Operating System

DOS 3.3.

### HOME DATA MANAGER FOR THE APPLE II

#### Manufacturer

Penguin Software

#### Computers

Apple II, IIe, IIc and compatible computers.

#### Operating System

DOS 3.3.

### FILE MATE UTILITY SOFTWARE

#### Manufacturer

Intersecting Concepts

#### Computers

IBM PC and compatibles; Zenith Z-100; DEC Rainbow 100.

#### Operating Systems

MS-DOS or CP/M.

### TROUBLE SHOOTING WITH KEPNER-TREGOE'S TROUBLE SHOOTER

#### Manufacturer

Kepner-Tregoe, Inc.

#### Computers

IBM PC, PC-XT and compatibles.

#### Operating Systems

PC-DOS or MS-DOS 2.0 or higher.

### PLAIN ENGLISH NOW IS A PROGRAMMING LANGUAGE FOR COMPUTERS

#### Manufacturer

Common Language Systems, Inc.

#### Computers

IBM PC, PC-XT, PC-AT and all true compatibles.

#### Operating Systems

PC-DOS and MS-DOS, version 1.1 or higher.

### QUANT IX PORTFOLIO EVALUATOR

#### Manufacturer

QUANT IX Software

#### Computers

IBM PC, PC-XT and compatibles.

#### Operating Systems

PC-DOS or MS-DOS, version 2.1 or higher.

### VISIWORD PLUS 1.5 IMPROVES AN ALREADY GOOD WORD PROCESSOR

#### Manufacturer

Paladin Software

#### Computers

IBM PC, PC-XT and compatibles.

#### Operating Systems

PC-DOS or MS-DOS, version 2.x.

**OLT-240** Book Reviews main menu. Six-month library of reviews.

**OLT-3840** Book Reviews for February.

Getting the Most Out of Your Epson Printer — Byte Books

Introducing dBASE III — Byte Books/McGraw-Hill

Pascal Primer for the Macintosh — Plumel/Waite Books

Hands On: Practical Tips and Useful Programs for IBM Personal Computers From the Pages of PC World — Simon & Schuster

Learning Apple II BASIC — CompuSoft Publishing

**OLT-250** New Product Announcements main menu. Six month library. New Product Announcements.

**OLT-3850** New Product Announcements for February.

#### Financial Independence

personal money management and tax estimation program from Broderbund Software

#### Prime Correspondent

correspondence management software from Prime Computer  
Fact Cruncher 2.0 idea or outline processor from InfoStructures

PowerLock 1000-PC security device from PC Security Enterprises Inc.

Facit 4513 and 4514 dot matrix printers from Facit Inc.

E-Z Graph II autographing subprogram for graphics from Galileo Scientific

Sakata SC-150 Color Monitor from Sakata U.S.A. Corp.

PC Desk III 6.0 desktop management program from Software Studios Inc.

NCR PC4 personal computer from NCR Corp.

SuperMAX surge suppressor, noise filter, brown out and telecommunication line protector from Panamax

## ADVERTISERS

**EBB-11** Instructions on use of the Electronic Bounce Back reader service system.

**EBB-160** Online Today Display ads main menu for past three months.

**EBB-20** Ad descriptions and EBB response system for February.

## MISCELLANEOUS

**OLT-352** How to contact OLT editors.

**OLT-353** How to report news to Online Today.

**OLT-357** Online Today Electronic Edition index of key pages. Reviews.

## Review of Smart Start

I was disappointed with James Moran's software review of Smart Start (December, pp. 50-51). I don't know anything about Smart Start, but I don't understand how Moran could say that the

Commodore 128 has an "inconvenient operating system" with "no simple way to change screen colors or to perform a task as basic as running a disk directory." In fact, the C128 has a 44K ROM (BASIC and Kernal) operating system

that supports two disk directory commands (catalog and directory) and a simple color command to change background, foreground and border colors.

Moran also suggested that the C128 does not have a sprite editor or BASIC commands to support the SID sound chip. The truth is the C128 has one of the most complete sprite editors I've ever seen and the following sound commands are available from BASIC: ENVELOPE, FILTER, PLAY, SOUND, TEMPO and VOL.

Furthermore, if Moran wanted to include the C128 in a comparison with Smart Start, he should have pointed out that Commodore distributes a program with the 1571 disk drive called "DOS Shell," which allows the user to run programs from the directory, merge files and more.

It is entirely possible that Moran meant to qualify his remarks by pointing out that the restrictions he noted apply to the Commodore 128 when it is used in the C64 mode. (In this mode, the machine is essentially a Commodore 64.)

Philip L. Dunn  
Knoxville, Tenn.

## Reviewer's Response:

*I can understand Mr. Dunn's defense of the C128. The first personal computer I owned was a C64 and it's still chugging away. However, both the C64 and the C128 have operating systems that are an anachronism when compared with more recently produced personal computers (including Commodore's new Amiga).*

*The point of the review wasn't that the C128 lacks a sprite editor or a way to control the SID chip (I never said that), but rather that the software being reviewed was not a good value.*

*Finally, there are some problems in reviewing a software product that runs on more than one machine. Online Today tries to alert readers to possible inconsistencies between versions, and that is one of the reasons all reviews contain a reference to the computer model actually used in the test. In the case of the Smart Start review, the test machine was listed as a C64.*

James Moran

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## Guidelines to Requesting Information Through EBB

### Electronic Bounce Back

Electronic Bounce Back (EBB) is *Online Today's* electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and GO EBB.

CompuServe Page EBB-1

ONLINE TODAY ADVERTISERS  
ELECTRONIC BOUNCE BACK (EBB)

1. EBB Instructions
2. Online Today Display Ads
3. Print Edition Reviews
4. Shopper's Guide Classifieds

### Display Ads

GO EBB-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at prompts.\* EBB will add your User ID number and electronically forward your request to the appropriate advertiser(s). Inquirer names, addresses and ID numbers will

also be forwarded via U.S. Mail at the end of each month.

CompuServe Page EBB-160

ONLINE TODAY ADVERTISERS/EBB

1. Jan. 1986 Advertisers
2. Dec. 1985 Advertisers
3. Nov. 1985 Advertisers

### Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Electronic Bounce Back system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, go to page EBB-280 and select the appropriate listing, such as January Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the EBB system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe Page EBB-280

REVIEW LISTINGS/PRINT EDITION

1. Jan. Hardware Listings
2. Jan. Software Listings
3. Jan. New Product Listings

### Shopper's Guide

GO EBB-70. This is *Online Today's* classified section and is designed to enable readers to easily scan areas of interest.

To request information from Shopper's Guide advertisers send CompuServe Email or use traditional methods of communication.

CompuServe Page EBB-70

SHOPPER'S GUIDE

1. About Shopper's Guide
2. Rates and Information
3. Software
4. Services
5. Accessory
6. Retailers

### \*Note:

Additional requests during the same session will not require you to re-enter your name and address.

### Coverage of Atari Computers

Everyone would like to see more material relating to his or her particular brand of computer, and I am no different. However, I can't help but notice how Atari seems to consistently be left out of the picture. Yet, the Highlights section of *Online Today* described the Atari Forum as "the largest and most active group of Atari computer users in America today."

I enjoy not one but two Atari computers and use them daily on a professional basis. Yet, it is rare to read about them in any publication other than an Atari-oriented magazine. Unfortunately, I feel Atari's stigma of being a game machine in the "toy" category has hurt an otherwise good system of compatible hardware and software.

It would be nice to see a little more attention given to the products that, apparently, one of your most active groups utilizes. I would venture to say that Atari is responsible for "raising" almost a generation of computerists. Therefore, less elitism would be in line.

Ron Bennett  
Comfort, Texas

### Computer Journalism

The October issue of *Online Today* carried a story about charges of poor-quality computer journalism made by Bernie Whalen, communications director of the Association of Better Computer Dealers.

If Whalen's charges could be supported with clear evidence (at best, a dubious proposition), I suspect we'd find that "poor journalism" is strongly aided and abetted by the attitudes and/or behavior of Whalen and his associates.

Whalen made the charges in a newsletter to the ABCD membership. After I read your story, I wrote to ABCD in Kentucky on October 10, asking for a copy of his observations. As a journalist specializing in the computer industry, I'm always interested in feedback about specifics of journalistic sins I've committed.

As of November 1, I've received no reply. As far as I'm concerned, Whalen, having failed to put up, should now shut up.

Whalen's charge of "too many ads" in publications shows just how much he understands about the media business. Whenever I see self-appointed media experts evaluating the quality and practice

of journalism, the following theory occurs to me: is it possible that these experts define as "good" any journalism that is relentlessly Pollyanna-ish — mentions positives only (of products, individuals, stores, news, trends, etc.), omits any mention of any kind of non-positives, (e.g., an industry slowdown), and assiduously refuses to see anything negative on the horizon? (This kind of thinking seems to be particularly prevalent among retailers, incidentally.)

In the absence of contradictory evidence from Whalen, I'll continue to maintain this theory.

Howard A. Karten  
Randolph, Mass.

### Correction

In the "Leading Edge PC" Industry Watch item in the December issue of *Online Today*, it was incorrectly stated that the Leading Edge Personal Computer Model D with a 10MB fixed disk drive retails for \$1,495. That price is in fact for the dual floppy disk drive version. The 10MB fixed disk drive version retails for \$1,895.

## Are Japanese Holding Back New Technology?

Low-priced laser disk/computer combinations, true digital video and MSX computers as inexpensive as \$400 are some of the things Japan has in store for the United States.

But the Japanese are in no hurry to deliver these products to the United States, according to an author who recently returned from a fact-finding mission to Japan for U.S. software companies.

Robert Chapman Wood, author of the soon-to-be-published TAB book *\*The MSX Standard,\** says in a conference he initiated on The Source's PARTI that laser disk/computer combinations are coming down in price in Japan, and "at least some software houses expect them to be major consumer products in the Japanese market this winter."

Wood says Japanese developers told him that they are working on new chips to transmit, store and process high-quality digital pictures. To do that by today's standard requires a million digits per second, so "a typical hard disk could store only 10 seconds of television pictures and even the latest 550-megabit digital laser memory disks could store less than 10 minutes."

With a new chip, apparently in development, the million bits per second needed for digital pictures would be condensed to 64,000 bits per second. "Then up to two hours of television or high-quality, truly interactive video could be recorded on a 4.75-inch disk," Wood says. "Moreover, live television programs could be transmitted through new digital telephone lines already being installed in parts of both Japan and the United States."

The latest MSX computers, selling in Japan's electronic districts for about \$400, already contain the chip that is supposed to produce high-quality digital television, he says. "With 128K of RAM dedicated exclusively to the video display, they produce far better graphics than the Atari ST at a lower price."

The new MSX audio chip, scheduled for delivery later this year, "will contain a Yamaha digital synthesizer as standard equipment, so anyone will be able to 'play' virtually any musical instrument on his or her computer."

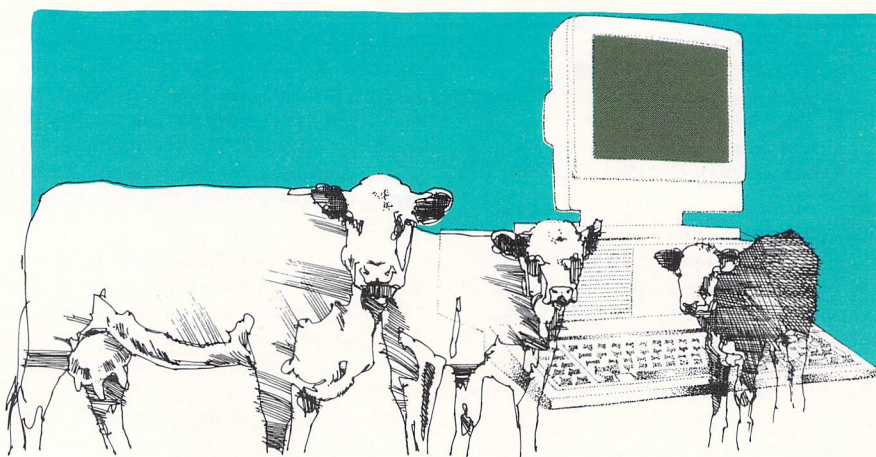
Despite all the advances and near breakthroughs, Woods says it appears the Japanese aren't interested in rapidly moving any products to the United States.

"Apparently the idea is to avoid creating a microcomputer boom like the boom that occurred with the Commodore 64, followed by a bust when people realized how primitive personal computers — and especially home computers — still are," Wood writes. "The Japanese seem to want a nice, steady, 50 percent per year increase in MSX-type computer sales, like they achieved with videotape

recorders. Then they'd have a 5 million-unit-per-year product by 1989 — about the time they expect to be able to deliver their truly digital, truly interactive video."

Wood's conference on The Source's PARTI is called "Japan Report."

— Dave Peyton



## Bovine Computing

Cows will never be the same.

Yes, it's time to retire those pastoral images of Bossy and Elsie, grazing away lazy summer afternoons and ambling into the barn now and then to give up buckets of warm milk. Cows today are cogs in a machine, each one a carefully monitored process in a complex closed-loop system.

The reasons are economic. Dairy farmers have traditionally practiced management-by-exception — paying attention to specific cows only when they stand out from the herd in sickness or calving. While the manufacturing industries were pouring millions into systems designed to raise productivity, farmers left things to nature and received mediocre performance in return.

They no longer can do that and expect to make a living. Responding to the need for efficient herd management is a host of new products, ranging from electronic estrus monitors that record amorous barnyard activity to automatic feeding systems that precisely match ration to lactation. Farmers now have the tools to minimize feed costs, maximize milk production and even manipulate biological cycles to keep their animals actively bred.

September's Farm Science Review, a sort of Comdex of the agriculture world, offered a close look at this new cross-

breeding of farm and technology. At the Lac-Tracker booth, show attendees could examine the latest in computer-controlled feeding stations: An encoded tag around the cow's neck rests against a sensing surface when she arrives for a meal, whereupon a milk-house computer system checks her health records, how much she has eaten recently, her position on the lactation curve, and the resulting mix of energy and protein input required. With a low growl the augurs turn, delivering custom-blended feed at a comfortable rate, stopping when either the computer or the cow decides she has had enough.

"Dairy farming is a whole new business," observed John McMullin of Lac-Tracker. "Every cow in the herd is now a miniature profit-and-loss statement." He demonstrated the rest of the system, displaying and printing cow status at the control console while commenting on increased yields, trend analysis and return on investment. Farmers have not fallen on hard times so much as they have fallen on change. The traditional lifestyle of working the land is yielding to hard-nosed factory management — the job of riding herd on computerized networks of cows, chickens, crops . . .

And all those other biological machines.

## The Shadow Guesses Wrong

It's a beautiful day. The sun is shining, the birds are singing and your disk drive is purring along like a contented pussycat.

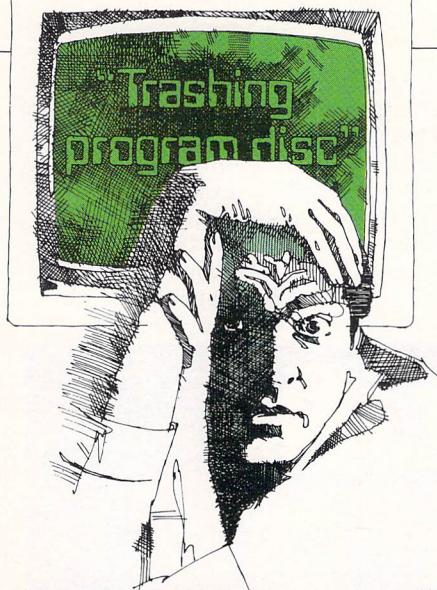
Then, disaster strikes.

Suddenly, without warning, ominous missives begin appearing on your screen: "Internal security violation; The tree of evil bears bitter fruit; Crime does not pay; The Shadow knows; Trashing program disk."

You grab your chest and collapse onto the floor, an innocent man.

The preceding scenario is not a work of fiction, at least not entirely. Last year, when Microsoft sent pre-release versions of its Access communications package to selected magazine reviewers, those exact doomsday words appeared on users' screens. In each instance, the reviewer was doing nothing more than running the program under ordinary operating conditions.

A Microsoft spokesperson says the messages were just a "minor software bug in the program." According to the spokesperson, the messages don't actually initiate a disk trashing (a rather serious threat, especially when your system disk is a hard-disk), but were "merely



designed to frighten software pirates."

But not all of Access' users bought Microsoft's excuse. "Now I know why their programmers work in Bellevue," one reviewer told Monitor. (Microsoft's headquarters are located in Bellevue, Wash.)

Incidentally, the Microsoft spokesperson claims the problem was fixed in a later revision of the program.

For the health of Access users worldwide, we sure hope so.

— John Edwards

## EJ Online

It has a simple name: *EJ*. But *EJ* is anything but simple.

*EJ* is an electronic journal designed for and written by public relations professionals. Appearing in PRLink, a private forum on CompuServe operated by the Public Relations Society of America for its members, *EJ* is a monthly publication of public relations case studies.

Editor E.W. Brody says *EJ* is just one of several items on PRLink to entice public relations practitioners to get online. "We want to make the content value so high that it becomes irresistible."

Since *EJ*'s purpose is to offer workable solutions to real problems, it just may prove to attract the nation's thousands of public relations practitioners. "If I have a public relations problem in Memphis that deals with toxic waste, chances are someone else is having that same problem somewhere else. It takes three months to get an article in print in one of our journals, and less than three hours to get it online in *EJ*."

The instantaneous nature of electronic publishing is tremendously important in

a profession dealing with problems that are the same from one community to another," explains Brody, who is coordinator of the public relations sequence in the School of Journalism at Memphis State University.

Brody admits to being thrilled with the potential of electronic publishing and sees just one disadvantage: not enough users. "It will take time, but as the value of online information becomes more apparent, public relations practitioners will realize that they cannot do without it. We can provide valuable information tonight that they can use in their jobs tomorrow."

Brody is also working to establish an electronic journal on the Public Relations and Marketing Forum (GO SFP-48) designed specifically for university and college educators. The articles in this journal would be of a scholarly nature and would be edited by an editorial board of university public relations professors.

— Cathryn Conroy

## Logo Network Seeks Pen-Pals

If your little Logophile wants to correspond with other Logo-loving youngsters, the Logo Class Pen-Pal Network might be just the ticket. The only catch is that you'll have to go through your child's teacher so the whole class can participate.

Offered through the University of Virginia's School of Education, the free service matches children on the basis of grade level, computer model, Logo version and geographic preference. Grade-school teachers usually write on their students' behalf, while older students correspond directly. Correspondence generally relates to class Logo projects, teaching tips and procedures. To keep the network active, children are encouraged to write at least bi-monthly.

For more information and a free application, send a stamped, self-addressed envelope to: Logo Class Pen-Pal Network, Ruffner Hall, Curry School of Education, University of Virginia, Charlottesville, VA 22901.

## Teleconferencing Alaska-style

Perhaps there is no place on earth better suited for teleconferencing than the frozen tundra of Alaska. In a move to increase public participation as well as save state revenues, Alaska government agencies have been given the option of offering access to business and public meetings via electronic media.

Legislation allowing any state or local government agency to consider material presented via audio, video or computerized electronic media as acceptable for attendance and participation at public meetings has been passed by the State Assembly and approved by Gov. Bill Sheffield.

According to *Government Computer News*, "The new law permits the use of teleconferencing to establish quorums, receive public input and — if all voting individuals have an opportunity to evaluate all testimony and evidence — to vote on actions."

The governor hopes that electronic access to meetings will increase the public's participation and input in state government.

Now, even an Alaskan blizzard won't cancel a meeting.

— Cathryn Conroy

## Assorted Bits

**Ziff-Davis Publishing Co.** has scrapped its idea for a daily electronic computer industry newsletter. The cancellation came just six months after Ziff-Davis unveiled plans for the publication — *Computer Industry Daily* — which was to contain no advertising and a stiff sub-

scription fee. The publication was reportedly canceled because of a lack of subscribers, inadequate writing talent and bleak financial prospects.

**PC's Limited**, A Texas-based PC-compatible importer, has unveiled an IBM PC-AT work-alike that retails for just \$1,995. The base unit, called the PC's Limited AT, features 1024K of

RAM, two serial ports, one parallel port and a clock/calendar with battery backup. The machine also comes with one floppy-disk drive, a combined floppy- and hard-disk controller card, an AT-type keyboard and a 192-watt power supply. The computer uses an Intel 80286 microprocessor running at 6MHz. A hard-disk drive and color monitor are available at extra cost.

**Apple Computer Inc.** recently initiated lawsuits against six Canadian firms, charging the companies with selling unauthorized copies of its personal computers. The suit, filed in Toronto, seeks an injunction barring the companies from selling the clones. The defendants in the court action are Pacific Rim Electronics Imports Inc., Gentek Marketing Inc., 546665 Ontario Ltd., Mintronics of Canada Ltd., O.S. Micro Systems Inc. and Trident Technology Inc.

**Apple Computer** has unveiled new hardware and software products for its Macintosh and Apple II families. The new Apple II products consist of ColorMonitor IIe and ColorMonitor IIc, high-resolution color 80-column monitors; UniDisk 3.5, a 3½-inch 800K disk drive; and a memory expansion card. Products for the Macintosh: Hard Disk 20, a 20MB hard-disk drive for 512K Macs, and Switcher, a software utility that allows Macintosh 512 and Macintosh XL users to work with several programs at once. In addition, Apple introduced products it says will work with either Apple II or Macintosh computers, including ImageWriter II, a dot-matrix printer; an optional ImageWriter II SheetFeeder; and a Hayes-compatible 300/1200-baud direct-connect modem.

**Borland International Inc.**, in connection with its acquisition of software publisher Analytica Corp., has re-introduced Analytica's acclaimed Reflex database/spreadsheet package for \$99.95. The offer is good through March 31, after which Reflex will cost \$149.95.

Borland has also introduced its first games package. "Turbo Gameworks" includes such popular favorites as chess, bridge and gomoku; it is available for \$69.95 for IBM PCs and compatibles. According to Borland, Gameworks is "also a development package for Turbo Pascal programmers who would like to develop or customize their own games programs and explore games theory."

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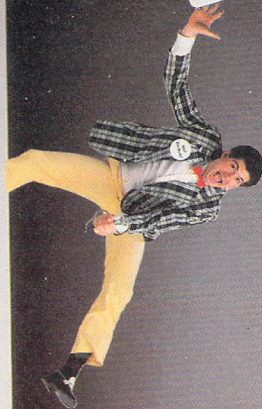
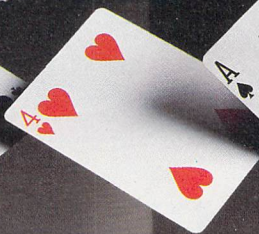
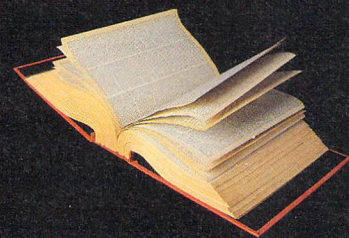
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It's five o'clock and the working day is over. Time to relax, perhaps have a drink, play some golf or watch the tube. And, of course, time to switch off the computer. Or maybe not.

Computer games have long been burdened with the "strictly for kids" label. It was never really accurate, but many a closet games-player pretended that using the terminal for a game was beneath his interest. Times change, though, and more and more professionals are coming to use their computers after working hours, taking time to relax and enjoy themselves with a game.

### The Developers

"It's funny, but I do play *BlackDragon* sometimes. It's a constant surprise. You never know what's going to happen.

"I played *Adventure*," says Robert Maples, creator of *BlackDragon*, "and I thought, this is really neat. This program talks back to me! So I started taking the game apart and implementing all the systems. I found it wasn't all that hard." *Adventure*, also known as *Colossal Cave*, was one of the first micro-computer games.

*BlackDragon* is now a regular on the CompuServe Information Service, as is *Adventure* (known as both *Original Adventure* and *New Adventure* on CompuServe). The game takes place in an advanced dungeons scenario, where the player wanders through a mysterious dungeon, seeking treasure, fighting villainous creatures and monsters, and finding clues that will help win the game. It continues to challenge and excite solitary game-players in their quest for brain-teasing entertainment. Maples' new game, *CastleQuest*, allows the player to search through a Transylvanian castle, battling vampires, ghosts and ghouls, while gaining treasure and seeking advice from sometimes sleepy doorkeepers.

"I love puzzles," Maples continues. "To me, a telecommunications system is a large puzzle. I think I actually enjoy implementing a game more than I do playing one. I started playing *Dungeons and Dragons* with some friends, and it occurred to me that it would be nice to have a program that would play interactively with people.

"What you see now is just the tip of the iceberg of what I originally conceived. I implemented this much of it,

and between various factors, I shelved it for quite a while. The thing I want is to have a multi-player game — but right now, I just have the rough drafts on paper."

Another game developer, Steve Estvanik, began his professional life as a biochemist. "When I went to school, I majored in biochemistry — only to find there weren't any jobs — so I moved into programming. My employer encouraged us to use the computers on our own, and I certainly did."

One of the programs Estvanik heard proposed was an air-traffic control simu-

nate in other players' sectors, and yours enter their sectors after they take off.

"You can be either competitive or cooperative," says Estvanik, "but cooperation gives everyone more points all around. The object of the game is to get the most points possible."

### From the Sea to Outer Space

*SeaWar*, a multi-player game of ships at sea, drifted through Scott Killen's imagination for a number of years before it appeared on CompuServe. "I'm a software engineer by trade," Killen reports. "I did not set out to create a game per se.

I had a multi-player game at the time and was intrigued by the possibilities of having several players play a game together."

*SeaWar* began as a considerably less complicated game, according to Killen. While playing another multi-player game, Killen enjoyed himself even while finding the game, at times, more trouble than it was worth. "It was very crude, very difficult to start a game up. I wanted to modify it to make a few improvements, but, unfortunately, I didn't have a source code. Then, I decided I could duplicate what they'd done in a few weeks of work. From that point on, people suggested enhancements and improvements. And I went on from there."

The project beginning as a fortnight's diversion eventually grew into a profitable venture. "At the time, I just wanted to spend two weeks and develop something that would give me some experience between terminals, and give me some insight into how these things work. I never expected to make money out of it," says Killen.

Similarly, the creators of *MegaWars III* and *The Island of Kesmai* are professionals in non-gaming fields. John Taylor works for General Electric's High Performance Division. Among his responsibilities is creating operating software for industrial robots. Together with Kelton Flinn, a Ph.D. in applied mathematics, Taylor found himself in games development much to his own surprise.

"I've always been torn between pure mathematics and computer programming," Flinn says, "and programming seems to be winning. Right now, all I do is games. I finished my doctorate in May 1984 and did some post-doctoral work

# ONLINE AFTER FIVE

By Alex Krislov

lator. A peace proponent with much knowledge of military history, he thought his background would provide an ideal combination of cooperation and tactics for a computer game. "You can be competitive but not aggressive in games," he explains.

In the upcoming CompuServe version, *Air Traffic Controller* will be a multi-player game. "You control a sector of space," according to Estvanik, "forty or 50 miles square. Some planes are going by, some are landing, some are taking off. You assign spots and track the planes."

In older games of this sort, when a plane left your sector, it effectively vanished from the game. In the multi-player version, planes entering your sector origi-

over the summer, but games development is now what I do for a living."

When Flinn and Taylor first contacted CompuServe, the product they had in mind was *The Island of Kesmai*. That game's complexity and variety, though, made swift implementation unlikely. While continuing to work on *Kesmai*, they looked over the various multi-player games online, and came up with the idea of an advanced *MegaWars I*.

*MegaWars III*, the result of their brainstorm, takes the basic ideas of CompuServe's *MegaWars I* a step further. Commands are more advanced in this space battle game and planetary governments are as important as the basic space-battle scenario of both games. Team playing is essential in *MegaWars III*

and that factor adds to the excitement.

"It's a social game, as well as a competitive one," Flinn notes. "People spend as much time chatting as they do fighting. We actually had a *MegaWars* convention last year. Almost 40 regular players got together in New York City to meet and get to know one another." Another *MegaWars* gathering took place in Columbus, Ohio in the fall of 1984.

As this article is being written, *The Island of Kesmai* is undergoing final testing. *The Island of Kesmai* represents a great advance over the original *Dungeons of Kesmai*. In *The Island of Kesmai*, you'll fight your way across land and sea, through a fascinating variety of environments and challenges. Instead of being confined to a small dun-

geon, as in the original game, *The Island of Kesmai* takes place over the landscape of an entire world.

### Taking Trivia Online

Among CompuServe's newest games is *You Guessed It!*, created jointly with Hallmark. Unlike most trivia games, *You Guessed It!* doesn't focus on questions and answers alone. This interactive, multi-player trivia game includes three different environments: a lobby, a studio game area and a lounge — where players and computer-simulated personalities interact.

"*YGI!* is the prototype for the ideal videotex product in that it combines interactivity, ease of use and 'entertainment' in a non-threatening, non-technical way," says CompuServe Product Manager Mary Vaughn.

Hallmark had the original idea of a multi-player, broadcast-based game show and CompuServe designed the game and all of its parts into what is now online. The reason for a joint venture was simple, according to Vaughn.

"Hallmark had the consumer experience and the writing talent to provide the editorial side of the game, and we had the technical expertise and the distribution channel — the information service. We had a mutual interest in videotex, having worked on earlier projects together."

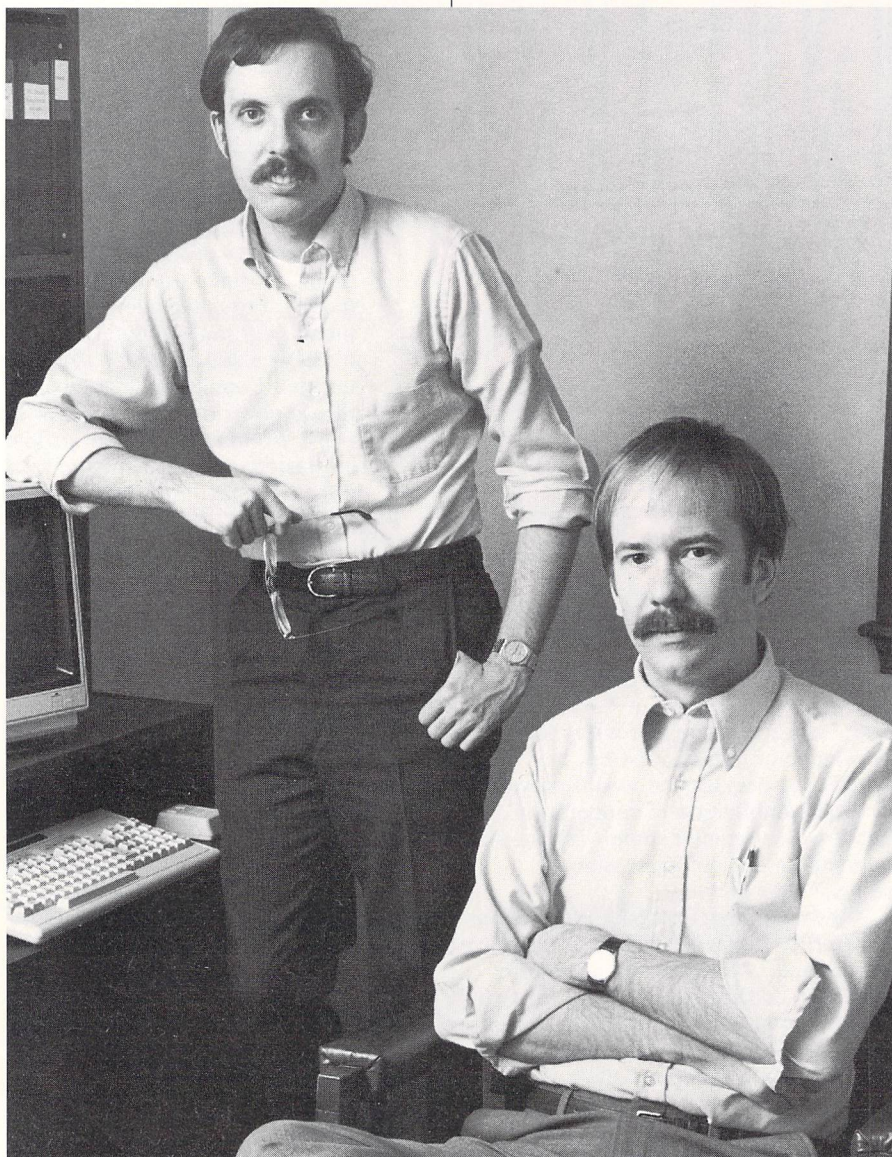
When you first come to *YGI!*, Dominic the Doorman greets you and welcomes you to the lobby where you can meet and talk with others. It's possible to be a team captain and recruit others, let yourself be recruited to a team or enter the studio audience area.

You'll find that the contest is sprinkled with glittering quips and humorous commentary. Game show host Bob Illuminati not only questions you but also trades jibes with other *YGI!* production crew members.

The game itself is a trivia game — with a difference. There is rarely a single correct answer. Instead, the responses of past players and the current studio audience (composed of other CompuServe users observing the action), determine point spreads. The questions often have a number of possible answers, and it's the most commonly agreed-upon answers that net the highest scores.

After the game, players congregate in the studio lounge. Here, you can discuss the game, plan new strategies for the next game or just sit and talk with your friends.

In *YGI!*, players accrue points each time they play. After they have a suffi-



Kelton Flinn and John Taylor looked over the various multi-player games online and came up with the idea for *MegaWars III*.

cient number, they can trade those points for real — not computer-simulated — prizes, supplied by the various sponsors of *You Gessed It!*.

Such sponsorship is a new idea on timesharing networks. While information providers have long supplied networks such as CompuServe with databases and other telecommunications products, *You Gessed It!* allows sponsors to advertise within a product, similar to the arrangement for a radio or television game show. While most of the sponsors have products available on CompuServe, some do not. In effect, the game opens videotex advertising to those in the business world who were unsure about committing time or expense to a telecommunications experiment.

"Response to *YGI!* has been positive and we have plans to introduce some surprises this year," says Vaughn. "We continue to refine the game technically, trying to make it more user-friendly and faster; we're also working on a major campaign to add new sponsors. The results of these efforts should be visible soon."

### Back to Basics . . . With Changes

Although many game scenarios exist today — from land to sea, and from air-traffic control towers to trivia challenges — the computer gaming experience began in a dungeon. The innumerable dungeon-related adventure games on the market and on telecommunications networks attest to the popularity of the original scenario.

Multi-player dungeon games, on the other hand, are a rarity. Often they are actually single-player games allowing the player to create a number of different characters, all of whom he directs by himself.

*British Legends*, coming soon to the CompuServe Information Service, began in England under the name M.U.D. (Multi-User Dragon). "Too big for any micro," read the British advertisements, "the game runs on a VAX 750." Indeed, the game is big and bold. Like all multi-player games, it is possible because of the advent of telecommunications networks.

In England, the game is a sensation. Its thousands of players battle over the right to rise to higher and higher levels of skill, their character types changing as greater experience is accumulated. Nor are they playing in a vacuum; what one player does can drastically affect another player's actions and chances for advancement.

*British Legends* creators Richard



Tom Woolley: "Our premise was that if the players were in their mid-twenties and older, they were more financially secure and more likely to stay in the game. It worked."

Bartle and Roy Trubshaw met as students at Essex University. Now, Bartle lectures at Essex, while Trubshaw is a contract programmer who counts General Electric and Transystems among his clientele.

"Trubshaw loved dungeons and dragons games and wanted to write a multi-user system even then," according to Simon Dally, another member of the

*British Legends* team. "He saw no reason that there couldn't be a multi-user version, and he wrote it for fun. It mushroomed from there."

Dally's timely meeting with the creators made the commercial applications viable. "I saw the game and became fascinated with it. It had me hooked from the beginning," Dally says. "Since it wasn't going anywhere commercially at

# F E A T U R E

the time, I agreed with Richard and, eventually, Roy to set up a company for it. I took the game to British Telecom (Britain's national telephone system), and they said, 'We'll put up the money and give you the hardware.' "

The rest is history. M.U.D. enjoys phenomenal success in England, where thousands have been challenged by the long, complex trek to the high-ranking status of Wizard. CompuServe's version, *British Legends*, to be available online soon, is the first American appearance of true multi-player dungeon games.

## The Players

Computer game designers come from a bewildering variety of professions and backgrounds. But what kind of people actually play the games?

Tom Woolley, known as SuperScooper to CompuServe game players, runs the oldest role-playing game on the network. Since April 1983, every Monday night the clans gather for his online conference-driven dungeon game in The Gamers' Forum.

In a role-playing game, most of the players take on the identities of figures in the game. One might be a wizard or magician, while another is a barbarian fighter or a noble knight. One player serves as a "dungeon master," running

the game for the other players by settling disputes, charting courses through the scenario and making rules. The unique feature of the role-playing games is that no special software or programs are required. The players meet right on conference channels; their imaginations provide the rest.

It was games that first brought Woolley to CompuServe. "I went out and bought a modem and software just to play *MegaWars I*," he admits. "For a long time, that's all I did. Then, I got on the CB Simulator, and also played *Dungeons of Kesmai* and *Banshi*."

"I'm a dungeon-master for a group in The Gamers' Forum. I played in another game for a while, but all the players were pretty young — teenagers and kids. One night in CO, I met some other people like me, older people. They didn't want to play with the kids, either."

"So I went to the forum administrator, and proposed an all-adult game. At that time, most of the role-playing games had a turnover of players. Our premise was that if the players were in their mid-twenties and older, they were more financially secure and more likely to stay in the game. It worked."

Among the regular players in Woolley's group are an attorney, an environmentalist, a number of computer programmers and the manager of a print

shop. They log on from regions as diverse as California, Baltimore, Chicago, Fort Worth, Kansas and Tulsa. Two of them have been playing since the game's advent in 1983, and others have been members nearly as long.

Adding a bit of zest to the game, Woolley's wife Mary is on his team. The two have shared telecommunications since they met some years ago — on CompuServe. Theirs is one of the earlier "online marriages." For Tom, the game is strictly relaxation from his restaurant work during the day. Mary works as a computer programmer.

Another team plies its crafts in *MegaWars I*, a space-warfare simulation. "Team Dune" is led by Martin Maners, known online as "Leto II." "I started playing *MegaWars I* back in 1982," Maners says. "After playing with a team called Mike's Marauders, or something like that, I started talking to people on The Multi-Player Games Forum and we got up a new team. Because I was an older player, not just in age — I'm 42 — but also in experience, I was elected dictator." In Team Dune, dictators are elected for three-month terms. While in office, they take absolute charge, thus making for an odd combination of democracy and dictatorship.

Maners is an engineer for General Electric specializing in electrical construction

## All kinds of Games

Animal Game	GO ANIMAL
Astrology	GO ASTROLOGY
Baffle Word Game	GO BAFFLE
Banshi	GO BANSHI
Biorhythms	GO BIORHYTHMS
BlackDragon	GO BLACKDRAGON
Blackjack (Multi-player)	GO BLACKJACK
Casino	GO CASINO
Castle Telengard Game	GO CASTLE
CastleQuest	GO CQUEST
Command Decision	GO COMDEC
Fantasy	GO FANTASY
Flying Buffalo	GO BUFFALO
Football	GO FOOTBALL
Golf	GO GOLF
Hangman	GO HANGMAN
The Island of Kesmai	GO ISLAND
Lunar Lander	GO LUNAR
MegaWars I	GO MEGA1
MegaWars Ib Pictures	GO MWIPIC
MegaWars III	GO MEGA3
New Adventure	GO NEWADVENT
Original Adventure	GO ORADVENT
Scott Adams' Games	GO ADAMS

## SeaWar Space War Word Scramble

## GO SEAWAR GO SPACEWAR GO SCRAMBLE

## Trivia Games

Aviation Forum Trivia	GO AVSIG
Florida Forum Trivia	GO FLORIDA
Halley's Comet Trivia	GO HALLEY
Health Forum Trivia	GO HCM
Hollywood Hotline Trivia	GO HHL
Science Fiction Trivia	GO SCIFI
Online Scavenger Hunt	GO FIF
ShowbizQuiz	GO SHOWBIZQUIZ
Stage II	GO STAGEII
The Multiple Choice	GO TMC
Traveler's Challenge	GO ETC
You Guessed It!	GO YGI
The Whiz Quiz	GO WHIZ

## Information About Games

Computer Sports World	GO CSW
The Electronic Gamer Newsletter	GO EGAMER
The Gamers' Forum	GO GAMERS
Las Vegas Hotline Sports	GO LVS
The Multi-Player Games Forum	GO MPGAMES

projects. While he is no stranger to programming — he's been involved in programming for electrical distribution in high rises and industrial plants — computer games are entirely a matter of fun for him.

"I've always had a vivid imagination," he says. "I like science fiction and 'Star Wars.' When you sit down in front of your computer and play *MegaWars I*, you really leave the earth, you're really out there. It helps me relax, especially with the way *MegaWars I* lets me talk to the other players on my team. It's nice to be able to sit back and do something completely different for a change."

All the members of Team Dune take their handles from Frank Herbert's famous series of novels. One player works for Boeing in Texas. Another lives in California. According to Maners, who lives in Alabama, only one of the players is under 20 years old. "The rest average from 25 to 50 years old. When you play as we do, the people you play with are mostly professional people. They have to be to have that kind of disposable income."

#### Games Exchanges

Playing games is one thing; discussing them is another. Despite the wide popularity of both online and diskette-based microcomputer games, public forums for game enthusiasts are a recent development.

In the beginning, other forums filled the need for discussion. The Micronetworked Apple Users' Group (MAUG) on CompuServe had a special section just for Apple computer games. The traffic there was heavy, even for the constantly moving Apple Users' Group. So heavy, in fact, that a number of the regulars saw the need for their own forum, dedicated to nothing but games.

The Gamers' Forum and Multi-Player Games Forum administrator Patricia Fitzgibbons is a lawyer who specializes in online database research. She's been involved in running The Gamers' Forum since its inception some three years ago.

"When I started getting involved in online database research about four or five years ago, I naturally was subscribing to a number of telecommunications services," Fitzgibbons says. "At the same time, I was enjoying a number of the new games coming out. I looked around online a lot with a couple of friends, and realized that there wasn't any organized area where people could exchange hints and such. You'd put down your money on Zork and get stuck and not be able to enjoy the game anymore. So we decided to set up a fo-

## Making Trivia Non-Trivial

For those who prefer trivia without the game-show atmosphere of *You Guessed It!*, there are several trivia games in other areas of the CompuServe Information Service. Some of these are the creations of Howard Millman, a clinical psychologist and psychology teacher at the University of Maryland's Baltimore County campus.

"When I first came online, there weren't a lot of interactive things on the computer," Millman explains. "That's one of the things I have against television. Watching my children watch television, I disliked the hypnotic effect it had on them."

In response, Millman designed his first multiple choice trivia game. "I never expected it to go anywhere," he says. Instead, it went far.

There are a number of choices within Millman's trivia game, *The Multiple Choice* (GO TMC), ranging from *So You Think You Know Me* to *Witty Write-ins* and *Classic Quotes*. A recent addition to *The Multiple Choice*, *Slogans For Sale*, tests users on their knowledge of popular television and radio commercial lingo.

Then, there's *The Whiz Quiz* (GO WHIZ), a game from Grolier Electronic Publishing, provider of the online Academic American Encyclopedia. *The Whiz Quiz* is not only fun but also educational. A session with this game can send you scurrying to the online encyclopedia

rum on CompuServe."

Since its beginning, The Gamers' Forum has enjoyed an incredible amount of message traffic and variety. As the data libraries and subscriber interest grew rapidly, the forum expanded into The Multi-Player Games Forum and The Gamers' Forum.

"Anybody with an interest in games of any sort is welcome at The Gamers' Forum," Fitzgibbons reports. "We have people in there who are 80-hour-a-week professionals who come online because they want some relaxation. We have people who are interested only in chess and play via messages with someone at the other end of the country. We also have a big crowd of fantasy role-playing fans of all ages who get together once a week in our conference area."

The variety of regular game-players surprises even Fitzgibbons. "One of the

(GO AAE) to update your knowledge.

The Educational Travel Connection (GO ETC) hosts *The Traveler's Challenge*, an online quiz about history, people, places and sightseeing. Information provider Randy LeGrant offers a new game every two weeks. The "challenge" with the highest first-time score receives an ETC *Traveler's Challenge* T-shirt.

If your interest is the entertainment world, try Hollywood Hotline Trivia (GO HHL), produced by Eliot Stein of the Hollywood Hotline service, and *ShowBizQuiz* (GO SHOWBIZQUIZ).

Some of the online forums, too, offer trivia games. Health Forum (GO HCM) members gather every Friday at 10 p.m. EST for a general trivia game, with the winner or winners receiving a week of free connect time in the Health Forum, according to forum administrator Bob Walters. There are also trivia contests in the Science Fiction and Fantasy Forum (GO SCIFI) and the Aviation Forum (GO AVSIG).

Members of the Florida Forum (GO FLORIDA) participate in a Disney Trivia Contest Tuesdays at 9 p.m. EST. Also in the travel area, there is an Online Scavenger Hunt this month as part of the Florida in February promotion.

And for those interested in tracking the appearance of Halley's Comet, there is an online Halley's Comet Trivia (GO HALLEY).

— A.K.

'Emperors' of *MegaWars III* is a dentist. Another player is a medical doctor. Another is an environmental lawyer who uses the handle "L'Eagle." My assistant administrator over on The Multi-Player Games Forum is vice president of a company that makes musical products. And a lot of our users are the type of people who make \$400 a day programming COBOL and such languages. A while ago, during a chess tournament," she says, "We had a physicist from Los Alamos."

Each forum has its own Data Library (DL). The Data Library for The Gamers' Forum includes "help" files for new users and players, game programs, transcripts of games, names of members who like certain games, and online newsletters. The Multi-Player Games Forum Data Library contains mostly "help" files for beginning and advanced players



Patricia Fitzgibbons: "We have people in The Gamers' Forum who are 80-hour-a-week professionals who come online because they want some relaxation."

of CompuServe's online multi-player games.

*The Electronic Gamer* is an online "magazine." Among its many features are regular columns and exclusive articles. New games are reviewed by independent writers and judged on their entertainment value, ease of play and the level of difficulty involved in winning.

Available on *The Electronic Gamer* are various "Walkthrus." A "Walkthru" is precisely what it sounds like. The game is described step by

step, with exact instructions on moving through the game from start-up to victorious conclusion. For those who don't want so thorough a guide, "hint files" are provided. Each hint helps players solve a puzzle, but does not reveal the solution outright. The Gamers' Forum, meanwhile, is a non-specific special interest group open to any type of game-player. Chess contests are common, role-playing games regularly appear in conference, and the message board is always filled with discussion of, and hints for, the dazzling variety of games on the market.

The Gamers' Forum also boasts some of the best-known microcomputer game developers as regular conference guests. Forum members have met and chatted with Richard Garriot (designer of *Ultima*), Michael Berlyn (*Cyborg*, *Suspend-*

*ed* and *OoTopos*), Robert Woodhead (*Wizardry*), wargame designer Mark Herman and novelist Diane Duane (*Star Trek: The Kobioshi Alternative*).

The Multi-Player Games Forum, The Gamers' Forum's counterpart, is dedicated to a variety of multi-player games, with plans to accommodate several games currently under development.

#### All Work, No Play

Games, once the province of youth, are now an adult activity, appealing to the professional as well as to the student audience. As the audience for stimulating play and discussion grows, the crowd of game-players coming online after five will interact in ever-changing ways, in ever-changing games.

Alex Krislov is a free-lance writer from Cleveland. His CompuServe User ID number is 70007,2130.

# ON-LINE PC goes PRIME-TIME TV!

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"Is the "mike" on? It is?" RIGHT! Let's roll! (flashing a size eleven smile) "So, folks . . . why play "You Gussed It!"? Because, in addition to enjoying my sophisticated wit, good looks and charm, this game gives you the opportunity to . . ." (clears throat and turns left profile to camera)

"enjoy the **WACKED-OUT HUMOR** of announcer Phil Vox and the rest of the "You Gussed It!" studio crew;

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view games as a member of the **PARTICIPATING AUDIENCE** from the comfort of your home recliner;

accumulate points towards **FABULOUS PRIZES** to tantalize your friends and torment your enemies;

and make after-game mischief in the **PLAYERS' LOUNGE** with the regulars!"

(tripping over the microphone cord) "Take it from 'ol Bob, folks! Don't sit before the tube riveted in envy watching someone else have all the fun and win all the prizes! Turn to your pc and make the game show experience your own! So remember, what's the first thing you're going to do the next time you "tune" into CompuServe?" "YOU GRESSED IT!" (Go YGI)

GO EBB or circle 5 on the Reader Service Form.



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## Fiddling With Forums Part Two

Last month, we took a close look at the bulletin board area of CompuServe's popular forums. Sadly, that's where a lot of subscribers count themselves great discoverers, return for regular updates on the messages and never forge onward for greater rewards. While the forums are centered on their bulletin boards, they certainly don't end there.

Take another look at the Forums Menu. There's an item labeled "CO," which on closer examination turns out to be a local version of the CB Simulator. Choosing that option, you discover that the CO area is empty. I'm a forum administrator myself, and I've entered my own forum more than once to be greeted by the line "There is one user in Conference."

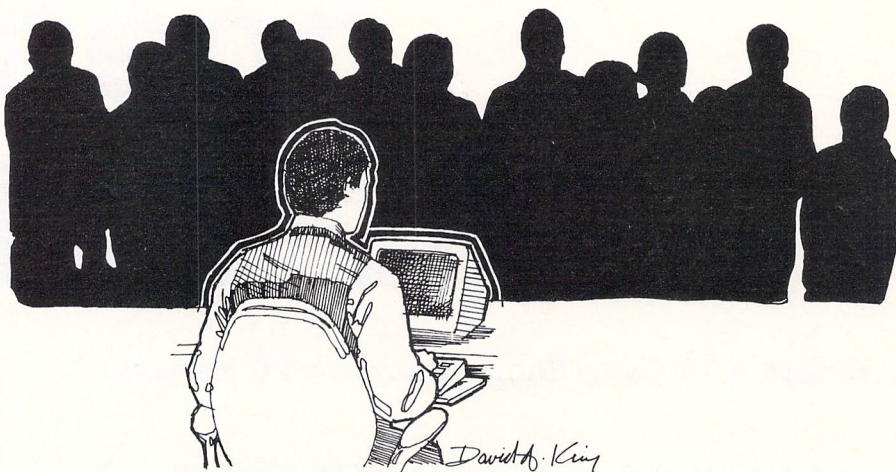
You haven't done anything wrong. At most times, the CO area in any given forum is indeed empty. But it isn't always empty. Each forum uses its local conference program at specified times. Some forums have special conferences each night, while others schedule a weekly event. There are a few that host conferences only for special guests and for forum meetings.

So when I'm notified that there's only one user in conference, I proceed to the CO area and inform the new user of the forum's conference schedule. But when the forum administrator doesn't happen to drop in at that opportune moment, how do you learn when to try out the forum's CO function?

First, look over the Conference Bulletin. By typing "B" at the forum's Function menu, you'll generate a list of available bulletins. The Conference Bulletin should tell you not only when regular CO chats are scheduled but also how to get a list of CO rules. If you need more information, leave a message for the forum administrator.

Why go to a forum's CO area when CB is always available? For the same reason you first joined the forum. The CO area, like the bulletin board, entices members with a specific interest to join. In a forum conference, you can talk, in "real-time," with others of similar interests, rather than spending time searching for them on CB.

Now let's take another look at that Bulletin Menu. Other listings include the Short Bulletin, the Regular (or Long) Bulletin and the Data Library Bulletin. The "short" bulletin is the same brief note you saw when you entered the fo-



rum. It lists upcoming events, special messages and other information of short-term interest. The "long" bulletin, however, is semi-permanent. It outlines the four areas of a forum (Data Libraries, Conference, Message Board and Bulletins) and gives general information about the forum. While the forum administrator decides how often you see the short bulletin, you only see the long bulletin if you pick it from the Bulletin Menu. It will never reappear on its own.

Finally, you look over the Data Library Bulletin. It lists new entries in the forum's database area. You can type "DL" to obtain a list of each library, complete with its name. Those names will be the same as those sported by the subtopics on the bulletin board.

Among the options the DL menu presents is a "keyword search." This allows you to specify certain keywords that lead to materials you want to see. Suppose, for example, you want files on modems. After choosing a keyword search, answer the following request for words by typing "modem" or "telecom." The system will respond with a list of files with those keywords.

If a file interests you, you can download it ("DOW"), if you have the proper telecommunications software. If not, simply "Read" the file; that command sends the file to your computer in plain alphanumeric characters, requiring no special answering protocols from your terminal.

Remember that there are different types of files in different forums. Many are in plain English, meant to be read and savored. Others are programs that will run on your terminal only if you have the right computer language. Read the file's description carefully before downloading it.

Leaving the libraries, we come, once again, to the familiar Function menu. That list of options is getting a bit tiresome, isn't it? Once you've familiarized yourself with your various choices, it's nice to rely on memory. And that menu can indeed be suppressed.

Choosing item 8, "Options," gives you the ability to bypass the forum menus for good or until you want to change back to the menu system again. A new menu appears, two full screens long. All of the choices listed let you configure your forum options to fit your needs. Here, you may choose either long or brief prompts from the system. Menus can be generated or suppressed. You might want to alter the line-length of your screen readout, or pick a new "handle" with the "Change Name" option. And finally, when you return to the forum proper by entering "T," you'll be asked if you want the changes to be temporary (enter "S") or permanent ("P"). When you understand all those options, you'll know you're no longer a neophyte.

In this and last month's column, we've looked over most of the basic forum commands and areas. But there are more treasures to be discovered. Look around for yourself and experiment. Don't be afraid to leave messages asking the forum administrator for help. Approached with the right attitude, the special interest groups are never-ending sources of interest and amusement. Even after years of experience, you may find you're still fiddling with the forums.

*Alex Krislov is a free-lance writer from Cleveland. His CompuServe User ID number is 70007,2130.*

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## SEC Filing Documents

Type of Filing	Abbreviation Used Online	Reason For Filing	Filing Must be Made	Effective Date
(Date on Filings Listing)				
Registration Statement	REGST	Document filed registering securities for public sale	Before securities can be offered	Date of filing at SEC
Prospectus	PRSPCT	Final version of the Registration Statement includes final offering price	Date offering is made	Date of filing at SEC
Shelf Registration	SHELF	Document filed registering securities expected to be sold within two years	Before securities can be offered	Date of filing at SEC
10-K	10-K	Annual document summarizing company's management and financial position	90 days after fiscal year end	Fiscal year end
10-Q	10-Q	Quarterly document providing continuing view of company's financial position	45 days after close of fiscal quarter	Fiscal quarter end
20-F	20-F	Annual document equivalent to 10-K filed by companies headquartered outside the U.S.	180 days after fiscal year end	Date of fiscal year end
8-K	8-K	Periodic document reporting events deemed to be important to the shareholders or the SEC	10 days after date of event	Date of event
Annual Report to Shareholders	ARS	Not an official SEC document — provided to shareholders at end of the fiscal year	Not an official SEC document	Fiscal year end
Proxy Statement	PROXY	Official notification to shareholders of matters to be brought to a vote at the Annual Meeting	Fiscal year end — before annual meeting	Date of filing at SEC
13-F	NA	Quarterly report of stockholdings filed by institutions	45 days after close of calendar quarter	Date of filing at SEC
13-D	SCH 13D	Document recording sale, purchase of change of intention by 5% owners of a company's stock	10 days after event	Date of filing at SEC
13-G	SCH 13G	Annual report of stockholders filed by 5% owners of company stock	45 days after close of calendar year	Date of filing at SEC
14D-1	SC 14D1	Document filed by those making tender offer which would result in 5% ownership of a company's stock	Date offer is made	Date of filing at SEC
14D-9	SC 14D9	Recommendation to shareholders by company subject to a tender offer	Within 10 days after tender offer is made	Date of filing at SEC
13E-4	SC 13E4	Document filed by company offering to repurchase its own shares	Date offer is made	Date of filing at SEC
13E-3	SC 13E3	Document filed by company offering to repurchase its own shares for the purpose of going private	Date offer is made	Date of filing at SEC
Form 3	NA	Initial statement of ownership by officers, directors or 10% principal stockholders	10 days after security first acquired	Date of filing at SEC
Form 4	NA	Statement of change in ownership by officers, directors or 10% stockholders	10 days after end of month action occurred	Date of filing at SEC

## Behind the Scenes At Disclosure

Disclosure II, available in different versions to CompuServe's Business Information customers and CompuServe Information Service subscribers with the Executive Option, provides current financial information on more than 9,500 companies. By understanding how and when the various financial data are compiled, business people can use the database more effectively.

The chart accompanying this article identifies the types of filing documents, the filing requirements and the effective dates for all documents. The purposes of each document are also included.

Disclosure company records are composites of financial and textual data compiled from Securities and Exchange Commission filing documents and company year-end reports. Financial figures and subsidiary names are extracted from 10-K and 10-Q reports. Listings of company officers and directors come from the proxy statements. While "Management Discussions" and "President's Letters" features are excerpted from the annual report, information about other corporate events comes from 8-K, 10-Q and 10-C reports.

Steven Goldspiel, Disclosure's executive vice president for marketing, calls Disclosure company records "a compendium of information." During the year, updated records are available *online* within six weeks of Disclosure's receipt of a document. On a daily basis, Disclosure collects documents from many organizations, including the New York Stock Exchange, American Stock Exchange, National Association of Stock Dealers and selected state agencies.

The quick way to find out if Disclosure has received a document is to view the online SEC Filings (Report 42 when running the CSFIN program). According to Goldspiel, this listing is updated within five to 10 days after Disclosure receives a document. Once the filings listing section has been updated, CompuServe users can obtain the full text of the document by calling the Disclosure Demand Center toll-free at 800/628-8241.

The date recorded in the filings listing is the effective date of the filing. The actual filing date for most documents is a later date, according to Goldspiel. For example, the SEC allows companies a maximum of 90 days after the fiscal year-end or the effective date to file 10-K reports. Thus, if a company's fiscal year ends on Dec. 31, 1985, the company doesn't have to file its 10-K report with

the SEC until March 31, 1986. It is available online to CompuServe users within six weeks of initial receipt at Disclosure, says Goldspiel.

After a document is examined, Disclosure enters the financial and management information into its internal computer system. These composite records, including information on sales, income, debts, assets, research and development, liabilities, management discussions and corporate events, are sent to CompuServe each week.

Still, not all companies file documents on a regular basis. This situation can occur for several reasons: An initial registration statement may never be followed by a prospectus. In this case, the offering was withdrawn or abandoned and the stock never sold. A company undergoing a major corporate change, such as a merger, take-over, name-change or bankruptcy, may stop filing. It is also possible for companies to delay filing for long periods of time by requesting multiple 30-day extensions. For instance, form NT10-K is used to ask for 10-K extensions. Finally, a company may simply be delinquent in its filings.

The latest document filed may indicate the reason for irregular filings. "A look at the Filings Listing, the Other Corporate Events or the Auditor's Report section of the company record will often show why a company has not recently filed," says Goldspiel.

"Other discrepancies may occur with non-U.S. registrants because filing requirements are not identical for those for U.S. companies." For example, non-U.S. companies filing with the SEC have six months after their fiscal year to submit a 20-F (equivalent to the 10-K). Foreign companies are not required to submit the same periodic reports that U.S. companies file. Because of these differences in filing requirements, information for non-U.S. registrants may not be filed as promptly or be as complete as that for U.S.-based companies.

If you are uncertain whether Disclosure has received a company's 10-K report or if you want to find out if a full company record has been updated, call Disclosure at 800/638-8076.

— Susan Willner

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## Micro 10K Plus Assists Investors

Compiling information on corporations and investments will soon be faster and simpler with the addition of the Micro 10K Plus program for CompuServe's Business Information customers.

Through this state-of-the-art screening and reporting program, users can at once access and review the full line of CompuServe's 10K Plus databases as well as its Value securities pricing database. This puts them in touch with historical financial data on more than 9,000 publicly held companies, historical stock quotes on more than 50,000 issues, and a variety of estimates and projections.

The program is especially helpful to money managers and corporate finance and acquisition specialists.

Micro 10K Plus allows users to "search" databases such as COMPUSTAT II®, Disclosure II, Value Line and I/B/E/S for all companies meeting certain established criteria. For instance, it may be used to search for all companies in a particular industry with a given annual sales volume.

Its flexible screening procedures put Micro 10K Plus a step ahead of other products of its kind. "We are more flexible. We have more ways you can screen and more accounts that you can screen on," explains Debi Hart, product specialist. This makes it possible to quickly narrow the selection set to a small group of companies.

When the desired companies have been identified, built-in color graphics capabilities allow users to create histograms or to plot security price trends. The program can also generate reports on specified data items, such as sales volume or historical stock prices. Those reports may be downloaded to a microcomputer for further analysis, or they may be sent to a user's monitor screen or printer.

Micro 10K Plus performs many similar functions to CompuServe's CSCAN, although Micro 10K Plus includes searching of information for only one year and offers less extensive selection procedures. The service is slightly less sophisticated than CSCAN, and is therefore simpler to use. Six years of historical data are available for reporting. It has an extensive "help" facility and provides instant feedback regarding the user's next step. A series of "windows" guides users through the procedures of database selection, company screening and report generation.

Professional money managers will find this service especially useful for selecting companies based on fund objectives, such as growth, income or speculation. "The data coverage and screening flexibility make Micro 10K Plus well-suited to this purpose," says Bob O'Malley, CompuServe's manager of financial products. "For instance, if companies are being evaluated on three safety criteria but any two of those criteria would satisfy the fund objectives, Micro 10K Plus can quickly find the companies

meeting any two of the three criteria."

Another application of interest to money managers is the evaluation of price performance on candidate companies. "With Micro 10K Plus, the analyst can examine price changes over one or more intervals of time for all selected companies," says O'Malley. The color graphic representations of price/volume performance also provide decision-making support. Earning projections, an important influence on an investor's buy/sell decision, can be inspected for more than 3,000 of the companies covered in Micro 10K Plus.

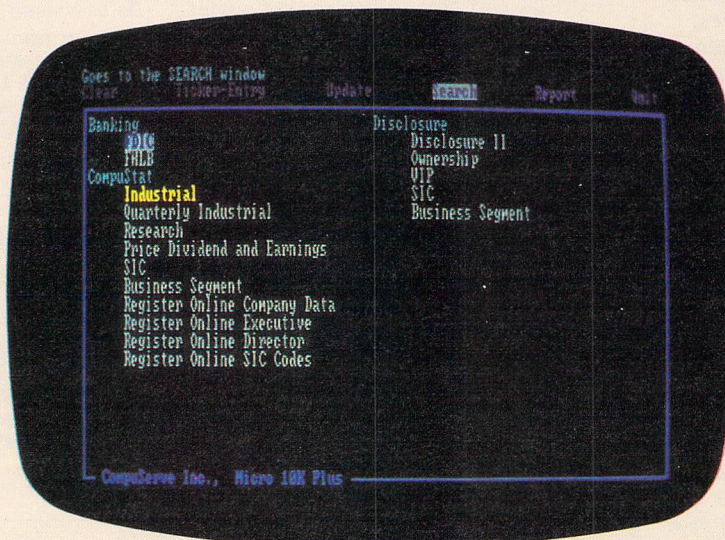
Corporate finance and acquisition specialists will find this service valuable for industry analysis. With Micro 10K Plus, it is possible to select company or business segments in a specific industry and compare critical performance measures of growth, profitability and capital structure. This form of analysis is often the foundation of competitive analysis and investor relations.

In addition, Micro 10K Plus makes acquisition analysis easier in the initial search phases of finding companies that meet target criteria and in more detailed phases, because the downloading capabilities of Micro 10K Plus allow users to quickly retrieve public data for their spreadsheet programs.

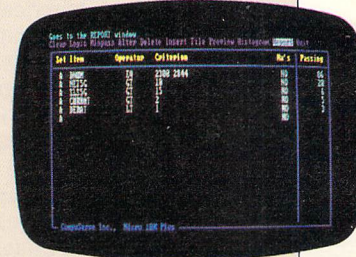
Micro 10K Plus is offered for a set monthly fee, a fact that is especially appealing to the business person who wants to set a monthly budget.

— Kathy Baird

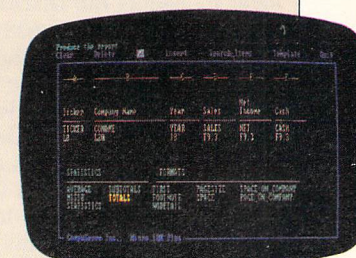
The Micro 10K Plus database window lists CompuServe databases to search. The search window provides an easy-to-use, consistent environment in which to do company searches. The number of companies passing each selection appears in the righthand column after each selection criterion is entered. The report window's capabilities are similar to the reporting capabilities on CompuServe's mainframe products. Reports can be sorted in ascending or descending order by any single reporting element.



Database window



Search window



Report window

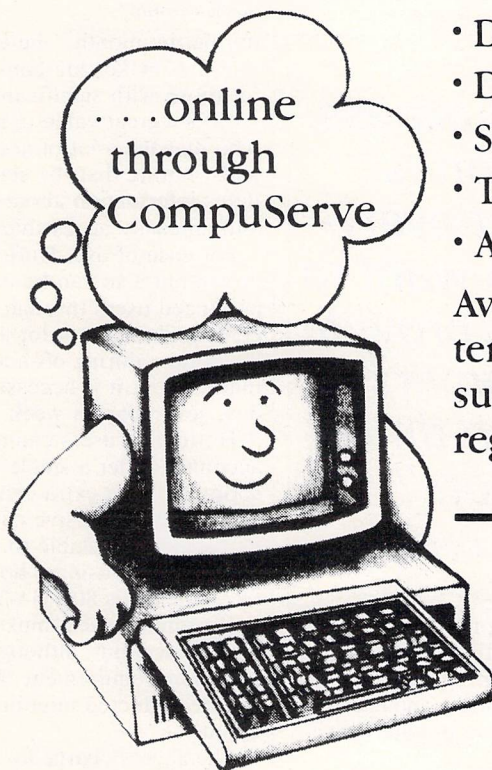
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## Huttonline: A Direct Line To Investment Information and Communications

To maximize their profits, buyers and sellers must base their investment decisions on timely information. That's where E.F. Hutton's Huttonline comes in. Through this service, even those with small investments have access to the latest sophisticated investment information that was once restricted to institutions and professional investors. Huttonline allows investors to keep an eye on the complete investment picture while monitoring the status of their personal holdings.

The service offers information on a user's personal E.F. Hutton account, general stock market information such as stock and option prices, research opinions from E.F. Hutton and Moody's, and an electronic mail service.

By using a personal password, investors can obtain information on their updated portfolios, their available assets and buying power, the value of their marginable and cash securities, and a list of all recently executed stock trades. Those who hold Asset Management or Asset Reserve accounts also can obtain the status of their checking accounts.

Huttonline's Quotes service provides prices on all stocks and options at a 20-minute delay, as well as information on the stock price's change, high, low and volume for the day. Users interested in timely information about investment opportunities can turn to Investment Briefs for articles on various investment vehicles and advice on tax and financial planning.

The "Research" service provides investors with approximately 600 pages of information based on the opinions of Hutton's economists and research analysts. It also allows users to order additional information.

Several services recently have been added to Huttonline. Market Watch monitors up to 800 stock issues, while Market Flash gives a synopsis of activity on all eight major indices throughout the trading day. Moody's Equity Database service gives financial profiles of more than 3,500 public corporations, and the new Rates and Trends service covers economic data, including leading economic indicators and international currency exchange rates.

In late 1985, a comprehensive futures database was added. That section features E.F. Hutton futures news and research, and account information for individual futures investors. In the first

quarter of this year, real-time quotes from all domestic commodity exchanges will be added.

Planned for early this year is the addition of a major financial news service to provide investment-related information as it happens.

Huttonline's electronic mail service allows investors to communicate with their E.F. Hutton account executives at their convenience. It is not designed for placing orders or conducting securities transactions.

Huttonline was introduced by E.F. Hutton in an effort to provide better customer service. "In this business, information is just about everything," explains Bill Doyle, assistant vice president of E.F. Hutton and product manager for Huttonline. "We want to be able to provide our customers with more timely information."

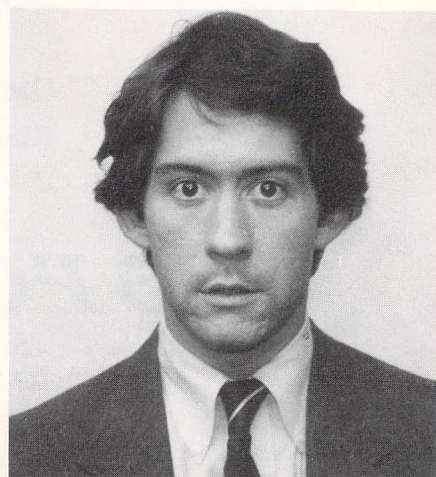
*"In this business, information is just about everything. We want to be able to provide our customers with more timely information."*

— Bill Doyle, E.F. Hutton

The service has approximately 2,000 users who hold an estimated 15,000 accounts. Twenty percent of those users are institutions and money managers while the remainder are private investors.

Although the service is international in scope, more than 90 percent of its users are located in the United States. Some are from as far away as Greece, South America, Spain, France, Germany and Israel.

"The kind of people who want Huttonline are active traders," says Michael Nock, national marketing coordinator for Huttonline. "Before Huttonline, clients would have to wait until the end of the month to get comprehensive information on an active account. With Huttonline, they can get all that information themselves at any point



Michael Nock, E.F. Hutton: "Before Huttonline, clients would have to wait until the end of the month to get comprehensive information on an active account."

during the month," he explains. "It's a tool that makes life considerably easier for those with significant investments."

"It's a great value to money managers who manage a lot of accounts," he adds, noting that the service consolidates information about many accounts into an easily accessible form.

For ease of use, Huttonline is menu-driven but also can be navigated by experienced users through a series of GO commands. Except for a brief daily down-time during off-hours for updating information, it is accessible 24 hours a day, seven days a week.

Huttonline users can monitor up to 80 accounts under a single Huttonline subscription at no extra charge. Huttonline also has an extensive customer service department available to answer questions during business hours. The toll-free number is 800/334-2477.

Huttonline users must have an E.F. Hutton account, although there is no minimum requirement. Huttonline fees can be deducted monthly from that account.

The access charge for Huttonline is \$6 per hour at night and \$15 per hour during the day. There is no extra charge for 1200-baud access. To access a free 10-day trial of Huttonline, CompuServe Information Service users should call Huttonline's Customer Service to obtain a temporary User ID number and password.

Information about Huttonline is available through The Electronic Mall on the CompuServe Information Service by typing GO MALL at any prompt and then GO EF within The Mall.

— Kathy Baird

## Where to Tune in Your Area

More stations plug into the Online Computer Report every week. Look for the most current list by typing GO RADIO at any prompt on CompuServe. Or if you are not a subscriber, call CompuServe to find out the nearest station carrying the program. Watch local broadcast listings for news about the show. If the show does not air in your area, call your local station and have them contact Jameson Broadcast, 614/476-4424, for more information.

### NC, Raleigh

WPTF-AM  
680 kHz

### NH, Keene

WKNE-AM  
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### NY, Albany

WQBK-AM  
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### NY, Ellenville

WELV-FM  
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### OH, Cincinnati

WNOP-AM  
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### OH, Cleveland

WWWE-AM  
1100 kHz

### OH, Columbus

WCOL-AM  
1230 kHz

### PA, Philadelphia

WIP-AM  
610 kHz

### PA, Pittsburgh

WMBA-AM  
1460 kHz

### PA, Wilkes Barre

WKRZ-AM  
1340 kHz

### SC, Charleston

WKCEN-AM  
910 kHz

### TX, Dallas

KZEN-FM  
97.9 mHz

### TX, Houston

KLEF-FM  
94.5 mHz

### TX, San Antonio

KRNN-AM  
930 kHz

### UT, Salt Lake City

KLO-AM  
1430 kHz

### VA, Norfolk

WNOR-AM  
1230 kHz

WNOR-FM  
98.7 mHz

### VA, Richmond

WRVA-AM  
1140 kHz

### WI, Milwaukee

WISN-AM  
1130 kHz

### AZ, Phoenix

KFYI-AM  
910 kHz

### AZ, Tucson

KTUC-AM  
1400 kHz

### CA, Riverside

KGUD-AM  
1490 kHz

### CA, San Francisco

KXLR-AM  
1260 kHz

### CO, Denver

KDEN-AM  
1340 kHz

### DC, Washington

WNTR-AM  
1050 kHz

### FL, Clearwater

WXCR-FM  
92.1 mHz

### FL, Orlando

WKIS-AM  
740 kHz

### HI, Honolulu

KHVV-AM  
990 kHz

### ID, Boise

KTOX-AM  
730 kHz

### IN, Indianapolis

WENS-FM  
97.1 mHz

### KS, Kansas City

KXTR-FM  
96.5 mHz

### NE, Omaha

KBEA-AM  
1480 kHz

### KY, Paducah

WKYX-AM  
570 kHz

### MD, Baltimore

WITH-AM  
1230 kHz

### MD, Hagerstown

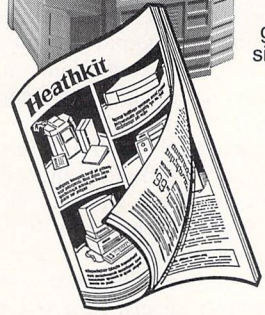
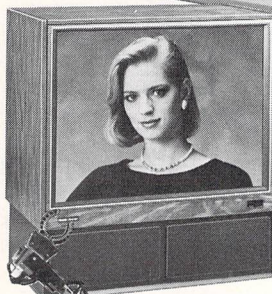
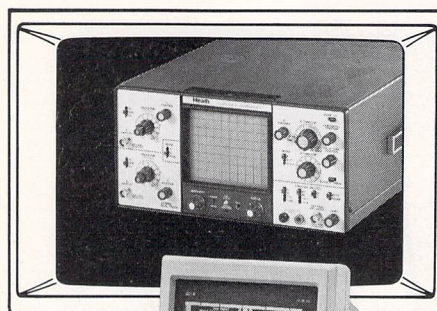
WHAG-AM  
1410 kHz

### NC, Charlotte

WGSP-AM  
1310 kHz

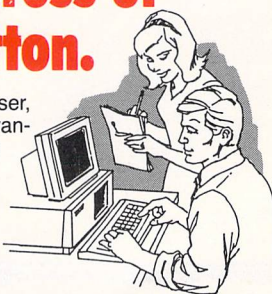
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CL-785

The Online Computer Connection is produced by Jameson Broadcast with offices in Washington, D.C., and Columbus, Ohio.



## OAG Adds Reservations

New reservation and ticketing capabilities on the Official Airline Guide Electronic Edition have put travelers in the pilot's seat as far as travel planning is concerned. Regardless of the hour, subscribers now can select and book their own flights and choose their own ticketing options.

Another enhancement — information on 29,000 hotels and motels in Europe, North America and the Pacific — combines with these reservation and ticketing capabilities to make the OAG Electronic Edition a total travel planning system.

Bookings can be made on 2 million direct and connecting flights for 750 airlines worldwide, including thousands of North American and international fares. And, according to Joe Bernardo, general marketing manager of electronic publishing for the Official Airline Guides, the online service offers comprehensive information without preference to any airline.

Bernardo adds that OAG Electronic Edition schedules are updated weekly, displayed chronologically by departure time, and listed from least to most expensive for easy price comparisons.

"North American fares are updated

daily and international fares are updated weekly," he adds. "Limitations and restrictions that may apply on certain fares are also displayed online."

Simple, on-screen commands will guide you through the reservation and booking procedure after you log on (GO OAG). Here's a quick preview of how to use the new enhancements:

**Option 1. To See Schedules.** Enter /S RETURN after the welcome screen and follow the prompts that instruct you to enter your departure city, destination city, departure date and departure time. OAG will then display up to six lines of flight schedules with departures closest to the time you requested. You can also see earlier and later flights, and connecting flight.

**Option 2. To See Fares.** For fare information for on-screen flights, enter F and the line number. If you want to find the cheapest fare before looking at flight information, enter /F RETURN after the welcome screen and follow the same series of prompts described above in Schedules. Limitations on fares displayed, such as advance purchase or minimum stay, are noted when applicable.

**Option 3. To Book Your Own Reservations.** Start at any schedule screen, then enter B and the line number of the flight you want to book. Prompts will guide

your entries for the number of seats, type of trip, fare selected, name and number, and other information. If you change your mind, you need only enter any slashed command or type C and press RETURN to cancel the flight. After completing your first booking, you may instruct OAG to save the online personal profile so that this data does not have to be entered each time. Travelers can make changes in the profile at any time.

**Option 4. Ticketing Options.** You may receive your ticket up to five ways, depending on the airline and flight chosen. These may include: 1) Through Thomas Cook Travel USA — a new member of OAG with 63 offices throughout the country, and the only travel service authorized to provide this convenience; 2) By mail; 3) Airport pick-up; 4) Pick-up at city ticket office; or 5) Self-ticketing, when you qualify to write your own ticket.

The new OAG capabilities are so easy to use, according to CompuServe Product Manager John Matura, that subscribers should expect few snags in handling their own bookings. "OAG even helps you with spelling," Matura explains. "If you're unsure about the correct spelling of a city or airport, just enter the first few letters of the city. The Electronic Edition will help you along, by displaying the city names closest to the spelling you enter. If your desired city does not appear, enter + to scroll forward in the listings, or — to scroll back."

Before or after booking your flight, you may want to view information on places to stay in your destination city. A /H RETURN will provide prompts that guide you through another OAG enhancement, hotel/motel information. You'll receive a complete alphabetical listing of accommodations, including name, address, location, range of room rates and quality rating. After choosing accommodations, you'll need to phone the selected hotel or motel to reserve your room.

Whether you travel once a week or once a year, for business or for pleasure, the OAG Electronic Edition provides a fast, comprehensive and convenient method for planning your trip. If you need assistance, the OAG Help Desk is on call 24 hours a day, 365 days a year. In the continental U.S., the number is 800/323-4000. In Illinois, call 800/942-3011.

— Carole Houze Gerber

## Changing Your Password

The CompuServe Information Service urges its customers to change their password(s) at least once a month.

The password should be a minimum of eight characters composed of two unrelated words separated by a symbol, for example: HOUSE\*MAGNET.

To find out how to change your password, type GO PASSWORD.

## Forum Offers Logo in Many Tongues

If English Logo has become too tame for you, how about taking a stab at the Spanish, Japanese or Dutch versions of this popular programming language? You also may want to look into Logo geography games, Logo adventure games and Logo word processing — all available on the Logo Forum (GO LOGOFORUM), compliments of information provider Jim Muller.

"There are things here for all ages and all levels of experience — from kindergarten to advanced programmers," Muller explains. "We offer activities, stories and a 'Kids' Corner' to show off what others are doing. It's a family forum, and I'd like to see more families get involved."

Data Libraries on the forum include information and activities on Logo, including:

- For all ages, activities that use Logo on and off the computer (DL 2)
- A Logo library offering a comprehensive guide to Logo sources and resources (DL 6)
- An Apple Logo area where you can create your own tiles and sprites (DL 4)
- A section for designing mazes that challenge the turtle to find its own way out (DL 4)
- Practical ideas for using Logo with the disabled (DL 7)
- Graphics printing procedures for the Apple, Atari, C-64 and IBM computers (DL 6)
- The Toddler's Turtle, with sample pictures of "just hatched" turtles (DL 1)

Muller says this list is "just the beginning" of what probably is the most comprehensive compilation of Logo information in the world. "I either have personally, or have access to, every version of Logo available in this country," Muller reports. "If I don't know the answer to an online question, I'll go to the

## 2400-Baud Service Available

CompuServe has added 2400-baud service in 29 cities. Those subscribers who have 2400-baud modems may connect with the CompuServe Information Service at that baud rate through CompuServe nodes in those cities.

The following cities currently have 2400-baud service available through CompuServe nodes: Atlanta; Baltimore; Boston; Chicago; Cleveland; Columbia, S.C.; Columbus, Ohio; Dallas; Denver; Detroit; Fairfax, Va.; Houston; Los Angeles; Monroe, La.; Louisville, Ky.; Memphis, Tenn.; Milwaukee; Minneapolis; New York; Philadelphia; Phoenix; Pittsburgh; Salt Lake City; San Diego; San Francisco; San Mateo, Calif.; Santa Clara, Calif.; Seattle; and

Wilmington, Del.

The standard connect charge for 2400-baud service, available 6 p.m. until 5 a.m. weekdays and all day Saturday and Sunday as well as on announced CompuServe holidays, is \$19 per connect hour. The prime connect charge for 2400-baud service, available 8 a.m. until 6 p.m. weekdays, is \$22.50 per connect hour. Connect time is billed in one-minute increments, with a minimum of one minute per session. Communications surcharges are in addition to connect charges.

To find out more about 2400-baud service in cities with CompuServe nodes, including the node phone numbers, type GO PHONES at any prompt on the CompuServe Information Service. For more information on CompuServe rates, type GO RATES at any prompt.



people who can provide the answer."

Complementing this forum's smorgasbord of activities is the Logo bibliographic database, containing more than 100 extracts on Logo from the Educational Resources Information Center (ERIC) database, as well as procedures for ordering ERIC documents from the U.S. Office of Education. Information provider Emil Levine says the organization of the database permits searchers to access a specific ERIC citation with as

few as 10 keystrokes after logging in.


"The Logo database marks one of the first full bibliographic databases in the world to appear on a videotex system," Levine says. Categories include Logo information by grade, subject, applications and disabilities. To access the Logo database, type GO LGO at any prompt on the CompuServe Information Service.

— Carole Houze Gerber

# Happy Birthday



# ay to us!



## Happy Savings to you!

It's our birthday!  
And we're having a birthday bash  
all month long in The Electronic Mall.  
Join us online as we celebrate with:

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### **Birthday Favors**

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### **Sales & Bargains**

Mall-wide discounts on name brand  
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### **Surprise Events**

Check "New & Noteworthy"  
(Go NNW) each week for news of  
special online events!

Happy Birthday, Abe!  
Happy Birthday, George!  
But most of all,  
Happy Birthday, Mall!

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## NEW PRODUCTS

### OS9 Forum Adds Software

The International OS9 Users' Group has contributed a public domain software library for use by OS9 Forum members. The software, available in Data Library 4 of the forum, includes many programs that are comparable with commercial offerings. GO OS9

### New Car Showroom Adds 1986 Prices

The New Car Showroom now contains prices for many of the 1986 models. This service allows the shopper to price cars and make comparisons between two models. Check the information in the New Car Showroom before purchasing a 1986 model. GO ATO

### Investors' Forum Open to All

The Investors' Forum, formerly offered only to Executive Service Option subscribers, is now available to all CompuServe Information Service subscribers.

This forum provides a meeting place for investors, brokers and others interested in the financial markets. GO MMM-18

### Agri-Commodities Offers Index

Agri-Commodities has added "Futures Focus Stock Index Plus," a newsletter offering a concise interpretation of stock market indices.

Investors will find "Stock Index Plus" useful in deciding whether the time is right to buy, sell or otherwise modify their portfolios. The "Stock Index Plus" and other Futures Focus areas are updated weekly. GO FFP

### HealthNet Adds Sections

HealthNet has added two sections to its Reference Library. One section includes information on "Obstetrics and Reproductive Medicine," and the other is titled "Eye Care and Eye Disorders." These comprehensive resources are compiled by specialist physicians and are available from the Reference Library menu. GO HNT

### Hollywood Hotline Adds Photos

Hollywood Hotline now offers the Movie Star Photo Database, containing photos of movie stars from all eras for display on your computer screen. The photo database is part of a continuing project in Hollywood Hotline. A biography and a filmography of the stars are coming at a later date, and more photos will be added to the database.

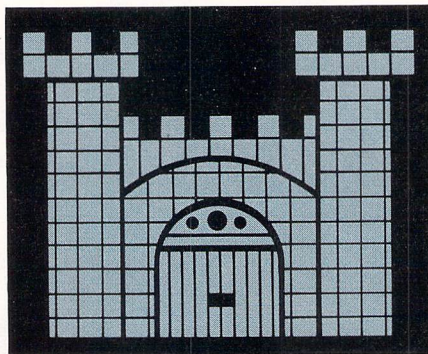
To view the movie star photos online, you must be using CompuServe's VIDTEX (IBM Professional Connection, TRS-80 Color Computer VIDTEX or Apple IIc VIDTEX) or similar software with high-resolution graphics capability. GO ENTERTAINMENT

### American Express Offers Gifts

For American Express® Card members, the American Express® Advance service, available through CompuServe, has "Be My Guest" restaurant gift certificates that let your family, friends and business associates have a free meal at any restaurant in the United States and Canada accepting the American Express Card. GO AXP

### Entrepreneurs' Network Adds Profiles

The U.S. Entrepreneurs' Network has added a feature allowing you to upload a description of your business or service. Called the "Member Profile," this feature is designed to help entrepreneurs make contacts for financing a venture and to help consultants to reach businesses in need of their services. GO USEN



### CastleQuest Game Added

CastleQuest, a game of adventure, mystery and suspense, is available on the Games menu. Players venture through a castle, complete with creaking wooden doors, vampire bats and werewolves. The goals of the game are to thoroughly explore the castle, kill the master of the castle and pick up treasures and points as the game progresses. GO CQUEST

### Visa Advisors Service Debuts

The Visa Advisors Service offers CompuServe subscribers up-to-date information on entry requirements for foreign countries. You can find out the type of documentation required and the procedure for obtaining it, and request visa and passport application forms online at no additional cost. For a fee, the Visa Advisors Service will process visa and passport applications from anywhere in the United States. GO VISA



### Vacations From American Express

The American Express® Advance travel service offers worldwide vacation information to CompuServe subscribers. Choose from escorted and hosted tours or design your own vacation with "Go Any Day" packages. Walt Disney World® and Club Med® are two of the popular destinations featured in Advance. CompuServe subscribers can order free brochures and request reservations online. GO AXP

### Vermont Tourism Available

Known for its fall foliage tours and abundant ski areas, the state of Vermont now offers online tourism information for CompuServe users. The Vermont Tourism database contains information on accommodations such as bed-and-breakfast inns, cottages and ski resorts; tourist attractions; recreational activities; and recommended dining places. GO VERMONT

### Comp-u-store Adds Outlet Store

Comp-u-store OnLine has added The Warehouse Outlet, a place to find discounted items, many of which were returned due to errors in ordering. All merchandise is in excellent condition and manufacturers' warranties are in full effect. Since each Warehouse Outlet item is unique, sales are on a first-come, first-serve basis. The Warehouse Outlet is located in Comp-u-store OnLine's Shopping Directory. GO CUS

## Gift of Time

*Online Today* offers subscribers the chance to write a 200-word essay on how they use CompuServe's Information Service.

Your essay should be typed double-spaced. Send it to *Online Today*, CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or by an Email message to 70003,1661. Please include your full name, address and User ID number.

Should we use your column, you will receive 10 hours of standard service connect time (a \$60 value) and a byline.

## User Explores Online Shopping

When lightning zapped my modem several years ago, I'd just signed onto CompuServe and was getting acquainted. I used the weather reports, and I'd even impressed a visiting foreign exchange student by accessing a weather report for his hometown of Antwerp, Belgium.

A new modem was just not in my budget, however, so I could only look through each issue of *Online Today*. Finally, last month, I found a modem in my price range.

In Northeast Wisconsin, the nearest direct line to CompuServe is in Milwaukee — 180 miles away. Fortunately, the phone company now offers a new calling service that allows me to call anywhere in Wisconsin for a reasonable rate. I was finally ready.

As a confirmed, life-long catalog shopper, I was anxious to check out The Electronic Mall and the other online shopping services.

The logon process was a breeze, just as I'd remembered it. Ordering was simple and The Mall gave me plenty of chances to make corrections before making it final. I ordered several items and then read the bulletin and new services sections. I was surprised and pleased at all the improvements.

The best surprise of all, however, came exactly five days later when United Parcel Service delivered the order I'd placed. No catalog had ever — and I mean ever — served me that quickly.

M. Paul Ferris  
Pound, Wis.

## Answers From Customer Service

**Q: I'm interested in traveling through the western United States. What information do you have online to assist my vacation planning?**

**A:** There are a number of ways that CompuServe can assist you in planning your travels. The West Coast Travel service will let you find out about the places you can visit in the western United States, including California, Colorado, New Mexico, Alaska, Hawaii, Oregon and Utah. You can make airline reservations with the Official Airline Guide or the TWA Travelshopper. The Official Airline Guide recently has added hotel/motel information. In addition, the A-Z Worldwide Hotel Guide will help you find a hotel that suits your needs. To access these services, type GO TRAVEL from any prompt on the CompuServe Information Service.

**Q: I am planning to take a vacation during the winter months and would like to know if CompuServe offers a service that would help me plan such a trip.**

**A:** CompuServe's Vermont Tourism service (GO VERMONT) provides information on places to stay — whether it be a cozy bed-and-breakfast inn or a large resort; things to do, such as skiing and snowmobiling or shopping for antiques; and places to eat. Names and telephone numbers of places to visit are included.

If you're interested in a vacation in Central Florida, access Discover

Orlando (GO ORLANDO). This service has information on Walt Disney World and other attractions. You can find out where to stay, what to see and other tourism information.

Sun and Sand Vacations offers information and vacation packages, including such sections as The Cruise Shop and Mexican Vacations. You can actually book a cruise online.

American Express<sup>®</sup> Advance offers vacation packages and information for national and international destinations. You'll find U.S. city vacation packages, U.S. resort packages and Walt Disney World vacations. The city-specific information includes details about the tour, hotels and rates, and rental car rates. You can order brochures and make vacation reservations online.

**Q: I travel abroad frequently and wonder if CompuServe lists travel restrictions for various countries.**

**A:** The Visa Advisors service (GO VISA) includes all the necessary documentation and information. The PanAm Travel Guide (GO PANAM) provides information on immigration, and TravelFax has detailed information on foreign countries.

In addition, the U.S. Department of State's Advisory maintains a continuously updated service (GO STATE) to Americans traveling abroad. These advisories cover warfare, political unrest, hotel/motel shortages, currency regulations and other information of interest to the American traveler.



## Valentine's Day At the Mall

This Valentine's Day, be traditional and send long-stemmed or sweetheart roses from Fifth Avenue Shopper (GO FTH). Or consider a silk- and dried-flower arrangement or an indoor flowering plant, also from Fifth Avenue Shopper.

You can give the gift of jewelry. Maybe diamond stud earrings or cultured pearls from Lenox of Fairfield (GO LNX). At Milkins Jewelers (GO MJ) you'll find diamond engagement rings and birthstone rings. And ladies can reciprocate with a man's diamond ring, also from Milkins. Or, if you're unsure of exactly what to get her, why not wrap up the Tiffany & Co. (GO TIF) catalog, tuck a note inside and invite her to select her own gift.

Visit Morrows of Florida (GO NUT) and browse their online selection of sweets and nuts. Maybe order a gift pack of dried fruit from The Growers Store (GO SDG) or a tropical luau from Florida Fruit Shippers (GO FFS). Or seduce her with a dozen oysters from The Lobster Market (GO SEA).

They say the way to a man's heart is through his stomach, and ladies eager to heed this advice will want to visit Simon-David (GO SIM). Give him Cognac Camus Napoleon, a bottle filled with 14 ounces of Gianduja Milk Chocolate Corks, or an old-time quart jar filled with spiced peanuts or layers of red, white and pink jelly beans. Or send him a Texas-style valentine of jalapeno popcorn, nacho chips, picante, con queso, Texas shaped-cheese, and pecan pralines in a gift basket.

Of course, you can consider less traditional gifts, too. For him, why not a telescope or binoculars from Cosmic Concepts (GO CC), imported cigars and a cedar humidior from Topgar Tobacco (GO TG), or new workout wear from Athlete's Outfitter (GO ATH)? For her, consider a video from French Films on Video (GO FF). Maybe the original "Breathless," Jean Cocteau's "Beauty & The Beast," or "Les Compares." Or promise her a week on the Riviera from Air France (GO AF).

Finally, at International Fur Wholesalers (GO RF), personal fur shoppers will recommend coats for the lady in your life.

## MERCHANDISE MART

<b>AC</b>	Landmark Contracts
<b>APC</b>	Apparel Concepts for Men
<b>AXM</b>	American Express
<b>BF</b>	Birkenstock Footwear
<b>CC</b>	Cosmic Concepts
<b>EE</b>	Electronics Experts
<b>EGS</b>	Electronic Gadget Store
<b>ELM</b>	Electronics Mart
<b>GDX</b>	Genovese Direct
<b>FP</b>	Just For Fun T-Shirts
<b>KO</b>	Eastman Kodak Co.
<b>PB</b>	Pocklington Bros.
<b>SR</b>	Sears, Roebuck & Co.
<b>VM</b>	VitaMenagerie

## FINANCIAL MART

<b>CN</b>	Colonial National Bank
<b>EL</b>	Equitable Life
<b>MU</b>	Max Ule & Co.
<b>MET</b>	Metropolitan Life
<b>SI</b>	Select Information Exchange

## CAREER CENTER

<b>TDG</b>	Teledata*Guide
<b>WS</b>	Wayside Systems

## PARK PLACE

<b>BL</b>	Bloomingdale's By Mail
<b>TIF</b>	Tiffany & Co.

## PERSONAL COMPUTER STORE

<b>BI</b>	Borland International
<b>CE</b>	Computer Express
<b>CPG</b>	CompuGame
<b>DSK</b>	1-800-Floppys
<b>GE</b>	Grolier Software
<b>HTH</b>	The Heath Company
<b>MM</b>	Marymac Industries Inc.
<b>MC</b>	MCTel Telecommunications
<b>MO</b>	Misco Computer Supplies
<b>SDA</b>	Software Discounters of America
<b>SR</b>	Sears, Roebuck & Co.

## RECORD EMPORIUM

<b>RC</b>	RCA Direct Marketing
<b>RW</b>	Record World

## TRAVEL AGENCY

<b>AF</b>	Air France
<b>AA</b>	American Airlines
<b>HS</b>	The Homestead
<b>WL</b>	Worldwide Property Guide

## AUTO SHOP

<b>ATB</b>	American Tire Buyers
<b>BU</b>	Buick

## BOOK BAZAAR

<b>BB</b>	Bantam Books
<b>DII</b>	Christian Book Store
<b>MER</b>	Mercury House
<b>MH</b>	McGraw-Hill, Inc.
<b>RP</b>	Rodale Press
<b>WB</b>	Waldenbooks Co., Inc.

## ONLINE CONNECTION

<b>EF</b>	E.F. Hutton
<b>GLO</b>	Globalink
<b>HB</b>	Harvard Business Review
<b>NN</b>	NewsNet
<b>OA</b>	Official Airline Guides
<b>VL</b>	Videolog Electronics

## NEWSSTAND

<b>CBS</b>	CBS Magazines
<b>CW</b>	CW Communications
<b>DJ</b>	Dow Jones & Co.
<b>ME</b>	EBSCO Magazine Entree
<b>RP</b>	Rodale Press
<b>US</b>	USA Today

## GIFT CORNER

<b>FFS</b>	Florida Fruit Shippers
<b>FTH</b>	Fifth Avenue Shopper
<b>HH</b>	Hobbit Hole/Wyan. Wines
<b>RF</b>	International Fur Wholesalers
<b>LNX</b>	Lenox of Fairfield
<b>SEA</b>	Lobster Market
<b>MJ</b>	Milkins Jewelers
<b>MOM</b>	Mom's Wish-A-Gift
<b>NUT</b>	Morrow's Nut House
<b>SDG</b>	The Grower's Store
<b>TG</b>	Topgar Tobaccos
<b>SIM</b>	Simon David

## LEISURE CENTER

<b>ATH</b>	Athlete's Outfitters
<b>BP</b>	Barracuda Sports
<b>BS</b>	Berry Scuba Co.
<b>FF</b>	French Films on Video
<b>GG</b>	The Game Getters, Inc.
<b>HF</b>	Carolina Health & Fitness
<b>MV</b>	Magic Castle Video
<b>RR</b>	Rin Robyn Pool & Patio
<b>SB</b>	Stark Bro's Nursery

# HIGHLIGHTS

**BRIEF DESCRIPTIONS OF MANY SERVICES AVAILABLE  
ON THE COMPUERVE INFORMATION SERVICE INCLUDING  
A COMPLETE SUBJECT INDEX.**

## COMMANDS

**Contained in this volume of Highlights is information current as of January 1986**

Highlights, published by Online Today magazine, is your handy digest of CompuServe Information Service products and services.

Highlights contains the complete CompuServe Information Service subject index, including the "GO" page locations to find online items easily.

Also included are brief descriptions of many subjects and services available on CompuServe. Different subject items and services will be featured in each issue, so we suggest you keep successive issues of Highlights as handy references.

The following is a list of commands for using the CompuServe Information Service. Simply type the letter or letters preceding the definitions shown here and then press the (ENTER) or CARRIAGE RETURN key.

### **B — BACKWARD**

this command will back you up and redisplay the page preceding the one you are reading.

### **F — FORWARD**

this will take you FORWARD one page. It displays the next page in a series of pages. Pressing the (ENTER) or CARRIAGE RETURN key once will also display the next screen of information.

### **G — GO**

the GO command will take you directly to a page specified by an information provider code and page number, for example, GO TRS-1. By typing GO, and the information provider code (no page number), you will be taken to the first page of the information provider area.

### **H — HELP**

you will receive instructions after typing in HELP and pressing the (ENTER) or CARRIAGE RETURN key.

### **M — MENU**

this means previous MENU. This command will take you to the menu page which directed you to the page you are currently reading.

### **N — NEXT**

this command will take you to the NEXT topic listed on the menu on which you made

your current topic choice. If you chose topic 5 on the most recent menu, then NEXT will display topic 6.

### **OFF**

this command will disconnect you from CompuServe immediately after it is typed in and followed by an (ENTER) or CARRIAGE RETURN.

### **P — PREVIOUS**

this command will take you to the PREVIOUS topic listed on the menu located before the one you chose to read. If you chose topic 5 on the most recent menu, then PREVIOUS will display topic 4.

### **S — SCROLL**

this command will allow you to continuously print pages to your screen until the last page in a series is displayed. If you are at a menu page, typing S followed by the number which corresponds with the menu topic, will continuously print the pages related to that topic to your screen.

### **T — TOP**

the TOP menu page. This takes you directly to the first page of the CompuServe database (TOP).

## USER INFORMATION

### **GO HELP**

#### **Billing: Your Charges, Rates Options, Making Changes**

provides you with information about your current and past charges for purchases and services used, displays the current rates for using the CompuServe Information Service, and allows you to change the existing information about your current credit card, or to enter another credit card choice.

GO BILLING

#### **Change Terminal Settings**

shows you how to specify terminal type, length of line, width of line, point of entry at

log on, EasyPlex waiting notice at log on, etc. You can make the default settings permanent or temporary to that session.

GO TERMINAL

#### **Change Your Password**

prompts you for your current password and then asks for your new choice of password. You are immediately notified when the password is changed successfully.

GO PASSWORD

#### **Command Summary and Usage Tips**

displays a brief description of the commands which can be used in the Videotex area.

GO COMMAND

#### **Electronic Bounce Back**

makes it easy for you to request free information from advertisers in *Online Today* magazine. Insert your name, address and names of any advertisers from whom you'd like information.

GO EBB

#### **Log on Instructions & Numbers**

searches and displays the most up-to-date list of telephone access numbers by the state or area code you select. Pending and recent changes are available as well as a complete list by baud rate.

GO LOGON

# H I G H L I G H T S

## Feedback to CompuServe

briefly describes how to use the Feedback service and then allows you to send comments, suggestions or questions to the Customer Service staff, etc. Your Feedback is read and responded to via EasyPlex to the same User ID which entered the message. Feedback responses are usually made within 48 hours after receipt by Customer Service. Your connect time is free while using this service, in the form of a credit given for the time you use Feedback. It is recommended

that you use Feedback to communicate with the CompuServe Information Service.  
GO FEEDBACK

## Online Today Electronic Edition

an electronic extension of *Online Today* magazine. Contains daily-updated computer and videotex industry news; reviews of hardware, software and books; new product announcements; and a direct link to *Online Today* advertisers.  
GO ONLINE

## What's New

offers weekly announcements of new and enhanced features available from the CompuServe Information Service.  
GO NEW

## Subject Index

displays the entire Subject Index or searches and displays features by key word entry. It also lists the IP code/page reference for each item so you can use the G (GO) command to directly access the item of your choice.  
GO INDEX

# S U B J E C T I N D E X

The CompuServe Information Service subject index is updated constantly. For the most recent list of subjects and services, type GO INDEX.

This subject index is current as of January 1986.

## A

A-Z Hotels ..... GO HOTELS  
AAMS Communications ..... GO AAMS

ADCIS Forum ..... GO ADCIS  
AOPA Forum ..... GO AOP  
AP Datastream ..... GO SPD-1005  
AP Videotex, Business ..... GO APV  
AP Videotex, Entertainment ..... GO APV  
AP Videotex, Politics ..... GO APV  
AP Videotex, Weather ..... GO APV  
AP Videotex, World News ..... GO APV  
ASI Flight Operations ..... GO ASI-11  
ASI Monitor ..... GO ASI-10  
ASI Service Difficulty ..... GO ASI-12  
EMI Flight Planning ..... GO EMI  
Model Aviation ..... GO MODELNET  
NWS Aviation Weather ..... GO AWX  
Aviation SIG (AVSIG) ..... GO AVSIG  
Aviation Safety Institute ..... GO ASI  
Aviation Weather ..... GO AWX

Access Phone Nos ..... GO PHONE  
Adult Education:  
The College Board ..... GO TCB  
Advertisers, Online Today:  
Electronic Bounce Back ..... GO EBB

Advertising:  
Natl. Bulletin Board ..... GO BULLET  
The Electronic Mall ..... GO MALL  
Advice:  
Government Publications ..... GO GPO  
Human Sexuality ..... GO HSX  
Advisories, Travel:  
Department of State ..... GO STATE  
Agri-Commodities ..... GO ACI  
Annual Reports:  
American Express (R) ADVANCE ..... GO AXP

Disclosure II © ..... GO DIS  
Standard & Poor's ..... GO S&P  
Value Line Financials ..... GO VLIN  
Antic Magazine ..... GO ANTIC  
Apple II & III User Group ..... GO APPLEII  
GO APPLEII  
Apple Mac Users Forum ..... GO MACUS  
GO MACDEV  
Apple Mac Developers' Forum ..... GO AOL  
Apples Online ..... GO AOL  
Ashton Tate Forum ..... GO ASHFORUM  
Ashton Tate Support Library ..... GO ASHTON  
Ask Mr. Fed Forum ..... GO MMS-20  
Astrology ..... GO GAM-45  
Astronomy:  
Naked Eye Astronomy ..... GO NIA  
Atari 8 Bit Forum ..... GO ATARI8  
Atari 16 Bit Forum ..... GO ATARI16  
Atari Developers Forum ..... GO ATARIDEV

Atlases:  
TravelVision ..... GO TRV  
Attorneys:  
Legal Forum ..... GO LAWSIG  
Autos, Buying:  
New Car Showroom ..... GO ATO  
StL Post-Disp., Autos ..... GO SPD

## B

Baffle Word Game ..... GO GAM-526  
Banking Services ..... GO BANK  
Banks:  
Bank One ..... GO BOC  
Huntington National Bank ..... GO HNB  
NCNB National Bank ..... GO NCB  
PSFS - Philadelphia ..... GO PSFS  
Shawmut Bank of Boston ..... GO SHW  
Southeast Bank ..... GO SEB  
United American Bank, Memphis ..... GO UAB

Banshi ..... GO GAM-30  
Billing:  
Monthly Charges ..... GO BIL-5  
Biorhythms ..... GO GAM-29  
Blackjack ..... GO GAM-60  
Bonds:  
Historical Prices ..... GO MMM-45  
Ticker Symbol Lookup ..... GO MMM-45  
Max Ule's Tickscreen ..... GO TKR  
Borland Int'l Forum ..... GO BORLAND  
Broadcast Professional Forum ..... GO BPFORUM

Brokerage:  
Max Ule's Tickscreen ..... GO TKR  
Quick & Reilly ..... GO QWK  
Rapaort Diamond Broker ..... GO RDC  
Unified Management ..... GO UMC  
Bulletin Board, Natl ..... GO BULLET  
Business News:  
AP Videotex, Business ..... GO APV  
CP Business Info Wire ..... GO BIW  
Decisionline Money ..... GO DEC  
Decisionline Real Estate ..... GO DEC  
Decisionline Weather ..... GO DEC  
The Business Wire ..... GO TBW  
Wash. Post, Business ..... GO TWP-12

CB Interest Group SIG ..... GO CBIG  
CB Society ..... GO CUP  
CP Business Info Wire ..... GO BIW  
CP/M Users Group SIG ..... GO CPMSIG  
Canadian News:  
CP Business Info Wire ..... GO BIW  
Cars:  
Auto Racing Forum ..... GO RIS  
New Car Showroom ..... GO ATO  
CastleQuest ..... GO GAM-31  
Changing Password ..... GO PASSWORD  
Changing Terminal Type ..... GO PROFILE

Charges-to-Date:  
Monthly Charges ..... GO BIL  
Children's Games ..... GO TMC-27  
Citizen's Band Simulator ..... GO CB-10  
Classic Quotes ..... GO TMC-7

## C

Classified Ads:  
StL Post-Disp., Autos ..... GO SPD  
StL Post-Disp., Classified ..... GO SPD  
College Planning:  
The College Board ..... GO TCB  
Petersons College Guide ..... GO PETERSONS  
College Press Service ..... GO CPS  
Color Computer SIG ..... GO COCO  
Color Graphics ..... GO CIS-91  
Command Level:  
Personal File Area ..... GO FILES  
Command Summary ..... GO COMMAND  
Commodities ..... GO COMMODITIES  
Commodity Markets:  
Agri Commodities ..... GO ACI  
News-A-Ton ..... GO NAT  
Quotes ..... GO COMMODITIES  
Commodore  
Education/Entertainment Forum ..... GO CBM  
Commodore Music/Graphics  
Forum ..... GO CBM  
Commodore Programming Forum ..... GO CBM  
Commodore Forum ..... GO CBM  
Communications Ind ..... GO SFP-30  
Comp-u-store ..... GO CUS  
Company Forecasts:  
I/B/E/S Earnings Estimates © ..... GO EARNINGS  
Standard & Poor's ..... GO MMM-11  
Value Line Projections ..... GO EARNINGS  
Comparison Shopping, Autos:  
New Car Showroom ..... GO ATO  
CompuServe Account Balance:  
Monthly Charges ..... GO BIL  
CompuServe Rates ..... GO BIL  
CompuServe Logon Inst. .... GO LOG  
CompuServe's Softex ..... GO SOFTEX  
Computer Art SIG ..... GO ARTSIG  
Computer Club Forum ..... GO CLUB  
Computer Lang. Magazine ..... GO CLM  
Computer Language Forum ..... GO CLMFORUM  
Computer Sports World ..... GO CSW  
Computing Tutorials ..... GO PCS-121  
Cooking:  
Electronic Gourmet ..... GO HMS  
Cupcake's Column:  
CB Society ..... GO CUP

## D

Daily Comment Newsletter ..... GO DC  
DEC PC Forum ..... GO DEC PC  
DEFAULT Parameters:  
Changing Terminal Type ..... GO PROFILE  
Directory of Public Officials ..... GO DPO  
Disclosure II © ..... GO DIS  
DISCOVER ORLANDOANDO ..... GO ORL  
DataPac Logon Instruct ..... GO LOG-41  
Department of State ..... GO STATE  
Diamonds:  
Rapaort Diamond Broker ..... GO RDC  
Digital Research Forum ..... GO DRFORUM  
Digital Research Inc ..... GO DRI

Directory of Public Officials ..... GO DPO  
Directory of Users:  
User Directory ..... GO DIRECTORY  
Disabilities Forum ..... GO DISFORUM  
Disk Area:  
Personal File Area ..... GO FILES  
Documentation Ordering:  
Product Ordering ..... GO ORD  
Donoghue Organization ..... GO DON  
Dor Sageth ..... GO GAM-527  
Download Co. Reported Data (IQINT) ..... GO MMM-67  
Download Financial Data ..... GO MMM-56  
Download Pricing Data (MQINT) ..... GO MMM-66  
Dr. Dobb's Journal ..... GO DDJ  
Dr. Dobb's Journal Forum ..... GO DDJFORUM

E  
EMI Flight Planning ..... GO EMI  
EPIE Database ..... GO EPI  
EPIE Forum ..... GO EDU-16  
Earnings Estimates:  
I/B/E/S © ..... GO EARNINGS  
Standard & Poor's ..... GO MMM-11  
Value Line ..... GO EARNINGS  
EasyPlex ..... GO EASY  
Economic Outlooks:  
Money Market Services ..... GO MMS  
Editorials:  
Wash. Post, Editorials ..... GO TWP  
Educators' Forum ..... GO HOM-137  
Educ. Research Forum ..... GO EDRESEARCH

E  
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Standard & Poor's ..... GO MMM-11  
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Money Market Services ..... GO MMS  
Editorials:  
Wash. Post, Editorials ..... GO TWP  
Educators' Forum ..... GO HOM-137  
Educ. Research Forum ..... GO EDRESEARCH

E  
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EPIE Forum ..... GO EDU-16  
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I/B/E/S © ..... GO EARNINGS  
Standard & Poor's ..... GO MMM-11  
Value Line ..... GO EARNINGS  
EasyPlex ..... GO EASY  
Economic Outlooks:  
Money Market Services ..... GO MMS  
Editorials:  
Wash. Post, Editorials ..... GO TWP  
Educators' Forum ..... GO HOM-137  
Educ. Research Forum ..... GO EDRESEARCH

E  
EMI Flight Planning ..... GO EMI  
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EPIE Forum ..... GO EDU-16  
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I/B/E/S © ..... GO EARNINGS  
Standard & Poor's ..... GO MMM-11  
Value Line ..... GO EARNINGS  
EasyPlex ..... GO EASY  
Economic Outlooks:  
Money Market Services ..... GO MMS  
Editorials:  
Wash. Post, Editorials ..... GO TWP  
Educators' Forum ..... GO HOM-137  
Educ. Research Forum ..... GO EDRESEARCH

E  
EMI Flight Planning ..... GO EMI  
EPIE Database ..... GO EPI  
EPIE Forum ..... GO EDU-16  
Earnings Estimates:  
I/B/E/S © ..... GO EARNINGS  
Standard & Poor's ..... GO MMM-11  
Value Line ..... GO EARNINGS  
EasyPlex ..... GO EASY  
Economic Outlooks:  
Money Market Services ..... GO MMS  
Editorials:  
Wash. Post, Editorials ..... GO TWP  
Educators' Forum ..... GO HOM-137  
Educ. Research Forum ..... GO EDRESEARCH

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EMI Flight Planning ..... GO EMI  
EPIE Database ..... GO EPI  
EPIE Forum ..... GO EDU-16  
Earnings Estimates:  
I/B/E/S © ..... GO EARNINGS  
Standard & Poor's ..... GO MMM-11  
Value Line ..... GO EARNINGS  
EasyPlex ..... GO EASY  
Economic Outlooks:  
Money Market Services ..... GO MMS  
Editorials:  
Wash. Post, Editorials ..... GO TWP  
Educators' Forum ..... GO HOM-137  
Educ. Research Forum ..... GO EDRESEARCH

# H I G H L I G H T S

Music Forum... GO MUSIC FORUM  
National Tourism Citilog... GO CITIES  
RockNet... GO ROK  
Science Fiction/Fantasy... GO SCIFI  
Showbizquiz... GO SHOWBIZ  
The National Satirist... GO KCS  
The Whiz Quiz... GO WHIZ  
Wit Sig... GO WIT  
Words of Wit & Wisdom... GO WWW  
**Entertainment News:**  
AP Videotex, Entertain... GO APV  
Hollywood Hotline... GO HHL  
Las Vegas Hotline... GO VEGAS  
**EpsOnLine**... GO EPSON  
**Executive News Service** © GO ENS  
**Exp. Inv./MicroQuote II**... GO MMM-19

## F

**FAA:**  
ASI Service Difficulty... GO ASI-12  
**Family Computing**... GO FAM  
**Family Computing Forum**... GO FAMFORUM  
**Fantasy**... GO GAM-16  
**Federal Gov't News:**  
Wash. Post, Gov't News... GO TWP  
**Fed. Registry Highlights**... GO GPO  
**Federal Reserve:**  
Ask Mr. Fed Forum... GO MMS-20  
Fedwatch Newsletter... GO MMS  
**Fedwatch Newsletter**... GO MMS  
**Feedback to CompuServe** GO FEED  
**Fifth Avenue Shopper**... GO FTH  
**Financial Analysis:**  
News-A-Tron... GO NAT  
Investment Analysis... GO MMM-55  
**Financial News (see Business News)**  
**Financial Statements:**  
Value Line Projections... GO MMM-10  
**Flight Planning:**  
Aviation Weather... GO AWX  
**Flight Planning:**  
EMI Flight Planning... GO EMI  
**Flying Buffalo**... GO BUFFALO  
**Football**... GO GAM-27  
**Forecasts:**  
MMS/Daily Comment... GO DC  
MMS/Fedwatch... GO FW  
Money Market Services... GO MMS  
**Forecasts, Weather:**  
NOAA Weather Wire... GO WEA  
**Foreign Lang. Educ. Forum**... GO FLEFORUM

**Forums:**  
ADCIS Forum... GO ADCIS  
AOPA Forum... GO AOP  
Apple II & III User Group GO APPLEII  
GO APPLEIII  
Apple Mac Users Forum... GO MACUS  
Apple Mac Developers' Forum... GO MACDEV  
Ashton Tate Forum... GO ASHFORUM  
Atari 8 Bit Forum... GO ATARI8  
Atari 16 Bit Forum... GO ATARI16  
Atari Developers Forum... GO ATARIDEV  
GO ATARISIG  
Auto Racing Forum... GO RIS  
Aviation SIG (AVSIG)... GO AVSIG  
Bacchus Wine Forum... GO WINEFORUM  
Borland Forum... GO BORLAND  
Broadcast Professional Forum... GO BPFORUM  
CB Interest Group SIG... GO CBSIG  
CP/M Users Group SIG... GO CPMSIG  
Color Computer SIG... GO COCO  
Commodore Education/Entertainment Forum... GO CBM  
Commodore Music/Graphics Forum... GO CBM  
Commodore Programming Forum... GO CBM  
Commodore Forum... GO CBM  
Communications Ind... GO SFP-30  
Computer Art SIG... GO ARTSIG  
Computer Club Forum... GO CLUB  
Computer Language Forum... GO CLMFORUM  
Consumer Electronics Forum... GO CEFORUM  
DEC PC Forum... GO DEPCPC

Digital Research Forum... GO DRFORUM  
Disabilities Forum... GO DISFORUM  
Dr. Dobb's Journal Forum... GO DDJFORUM  
EPIE Forum... GO EPIEFORUM  
Educators' Forum... GO HOM-137  
Educ. Research Forum... GO EDRESEARCH  
EpsOnLine... GO EPSON  
Family Computing Forum... GO FAMFORUM  
Florida Forum... GO FLORIDA  
Foreign Lang. Educ. Forum... GO FLEFORUM

Gamer's Forum... GO GAM-310  
Good Earth Forum... GO GOODEARTH  
HamNet Forum... GO HAMNET  
Heath User Group SIG... GO HEATHUSERS  
Hewlett-Packard Model 100 Forum... GO HP  
Human Sexuality... GO HSX-18  
IBM Novice Forum... GO IBMNOVICE  
IBM PC SIG... GO IBMSIG  
Interex/H-P Forum... GO INTEREX  
Investors' Forum... GO MMM-18  
Jazz Forum... GO LOTUS  
Journalism Forum... GO JFORUM  
Kaypro Users Forum... GO KAYPRO  
LDOS/TRS-DOS... GO LDOS  
Legal Forum... GO LAWSIG  
Literary Forum... GO LITFORUM  
Logical Systems SIG... GO PCS-49  
Lotus 1-2-3 Forum... GO LOTUS  
MEDSIG... GO MEDSIG  
MUSUS SIG... GO MUSUS  
MicroPro Forum... GO MICROPRO  
Microsoft SIG... GO MSOFT  
Military Veterans Services... GO VET  
Model Aviation Forum... GO MODELNET

Multi-Player Games Forum... GO GAM-300  
Music Forum... GO MUSICFORUM  
Natl. Issues Forum... GO ISSUESFORUM

OP-NET SIG... GO OPNET  
Orch-90 SIG... GO ORCH90  
Outdoor Forum... GO OUTDOORFORUM  
PDP-11 Forum... GO PDP11  
PR and Marketing Forum... GO PRSIG  
Pascal SIG... GO MUSUS  
Political Forum... GO POLITICS  
Programmer's SIG... GO PROGSIG  
Religion Forum... GO RELIGION  
RockNet... GO ROK  
Science Educ. Forum... GO SCIENCE  
SCI-FI/Fantasy Forum... GO SCFI  
SCI-FI Forum... GO SCIFI  
Software Publishing Forum... GO SPUB  
Space SIG... GO SPACEFORUM  
Sports Forum... GO HOM-110  
Students' Forum... GO STUFO  
Symphony Forum... GO LOTUS  
TRS-80 Color Computer Forum... GO COCO  
TRS-80 Prof. Forum... GO TRS80PRO  
TRS-80 Model 100 SIG... GO M100SIG  
TeleComm SIG... GO TELECOMM  
Texas Instruments Forum... GO TIFORUM  
Travel SIG... GO HOM-157  
U.S. Entrepreneurs' Network... GO USEN

VAX SIG... GO VAXSIG  
Whole Earth Software SIG... GO WEC  
WITSIGSIG... GO WIT  
Work-at-Home Forum... GO WORK  
The World of Lotus... GO LOTUS  
Writers and Editors SIG... GO WESIG

## G

**Gamer's Forum**... GO GAM-310  
**Games:**  
Animal Game... GO ANIMAL  
Astrology Calculator... GO ASTROLOGY  
Baffle Word Game... GO BAPPLE  
Banshi... GO BANSHI  
Biorhythms... GO BIORHYTHMS

BlackDragon... GO GAM-295  
Blackjack... GO BLACKJACK  
CastleQuest... GO GAM-31  
Children's Games... GO TMC-7  
Classic Quotes... GO COMDEC  
Command Decision... GO GAM-16  
Fantasy... GO GAM-41  
Flying Buffalo... GO GAM-27  
Football... GO GAM-110  
Golf... GO GAM-23  
Hangman... GO GAM-209  
MegaWars I... GO GAM-105  
MegaWars III... GO NEWADVENT  
New Adventure... GO ORADVENT  
Original Adventure... GO ADAMS  
Scott Adams' Games... GO GAM-43  
Scramble... GO GAM-57  
SeaWar... GO SHOWBIZ  
Showbizquiz... GO GAM-114  
Space War... GO TMC-44  
State Capital Quiz... GO TMC  
Trivia Test... GO WHIZ  
The Whiz Quiz... GO YGI  
You Guessed It!... GO GAM-21  
**Golf**... GO GAM-21  
**Good Earth Forum**... GO GOODEARTH

**Government Publications**... GO GPO  
**Graphics:**  
Color Graphics... GO CIS-91  
**Green Sheets:**  
Standard & Poor's... GO MMM-11  
**Guides:**  
Incorporating Guide... GO INC  
Pan Am Travel Guide... GO PANAM  
Product Ordering... GO ORD

## H

**Halley's Comet Database/Promo**... GO HALLEY  
**HamNet Forum**... GO HAMNET  
**Hand. Users' Database**... GO HUD  
**Hangman**... GO GAM-23  
**Healthcom**... GO HCM  
**HealthNet**... GO HNT  
**Heath User Group SIG**... GO HEATHUSERS

**Help:**  
Command Summary... GO COMMAND  
**Historical Pricing**... GO MMM-45  
**Hollywood Hotline**... GO HOLLYWOOD

**Home Shopping:**  
Comp-u-store... GO CUS  
Fifth Avenue Shopper... GO FTH  
MicroShopper... GO MCS  
New Car Showroom... GO ATO  
Savings-Scan... GO SAV  
The Electronic Mall... GO MALL

**Hotline:**  
Commodore... GO CBM  
Hewlett-Packard Model 100 Forum... GO HP

**HUG:**  
Heath User Group SIG... GO HEATHUSERS

**Human Sexuality**... GO HSX  
**Humor:**  
The National Satirist... GO KCS  
WITSIGSIG... GO WIT  
**Huntington National Bank**... GO HNB

## I

**I/B/E/S Earnings Estimates** ©... GO EARNINGS  
**IBM Novice Forum**... GO IBMNOVICE  
**IBM PC Forum**... GO IBMSIG  
**IIAA**... GO INS  
**Incue**... GO INCUE  
**INTEREX**... GO PCS-28  
**Incorporating Guide**... GO INC  
**Index**... GO IND  
**Index Oscillators:**  
News-A-Tron... GO NAT  
**Indices:**  
Current Day Quotes... GO QUOTES  
**Ind. Hygiene Forum**... GO SFP-47  
**InfoText**... GO IFT  
**Insurance, Home-Auto:**  
IIAA... GO INS  
**Intelligence Test**... GO TMC-32

**Interex/H-P Forum**... GO INTEREX  
**Internal Revenue Service**... GO IRS  
**Investments:**  
Commodities... GO COMMODITIES  
Current Day Quotes... GO QUOTES  
Donoghue Organization... GO DON  
Historical Pricing... GO MMM-45  
Max Ule's Tickerscreen... GO TKR  
MicroQuote II... GO MQQUOTE  
Portfolio Valuation... GO MMM-55  
Quick Quote... GO QUOTES  
Quick Way Brokerage... GO QWK  
Ticker Retrieval ©... GO TICKER  
World-Wide Investment Sys... GO WIS  
**Investors' Forum**... GO MMM-18  
**Issues, Legal:**  
Legal Forum... GO LAWSIG

## J

**Journalism Forum**... GO JFORUM

## K

**Kaypro Users Forum**... GO KAYPRO

## L

**Las Vegas Hotline**... GO VEGAS  
**LDOS/TRS-DOS**... GO LDOS  
**Legal:**  
Incorporating Guide... GO INC  
**Legal Forum**... GO LAWSIG  
**Liquid Green**... GO UMC  
**LINC Publisher Connection**  
**Database**... GO TPC  
**Literary Forum**... GO LITFORUM  
**Loan Amortization**... GO FINANCE  
**Logging On:**  
CompuServe Logon Inst... GO LOG  
DataPac Logon Instruct... GO LOG-41  
TYMNET Logon Instruct... GO LOG-11  
Telenet Logon Instruct... GO LOG-20  
**Logical Systems SIG**... GO PCS-49  
**Logo Forum**... GO LOGOFORUM  
**Lotus Forum**... GO LOTUS

## M

**MAUG:**  
Apple II & III User Group GO APPLEII,  
GO APPLEIII  
Apple Mac Users Forum... GO MACUS  
Apple Mac Developers' Forum... GO MACDEV  
**MEDSIG**... GO MEDSIG  
**MMS/Daily Comment**... GO DC  
**MMS/Fedwatch**... GO FW  
**MUSUS SIG**... GO MUSUS  
**Magazines:**  
Antic... GO ANTIC  
Computer Language... GO CLM  
Family Computing... GO FAM  
Online Today... GO OLT  
Online Visions... GO SCIFI  
**Macintosh Developers Forum**... GO MACDEV  
**Macintosh Users Forum**... GO MACUS  
**Magic Cube Solution**... GO GAM-35  
**Manuals:**  
Product Ordering... GO ORD  
**Max Ule's Tickerscreen**... GO TKR  
**Meal Planning:**  
Electronic Gourmet... GO GOURMET  
**Medical:**  
AAMSI Communications... GO AAM  
Healthcom... GO HCM  
HealthNet... GO HNT  
MEDSIG... GO MEDSIG  
Micro-MD... GO MDN  
PaperChase... GO PCH  
MegaWars I... GO GAM-209  
MegaWars III... GO GAM-105  
**Mergers**  
Max Ule's Mergersource... GO TKR  
**Micro-MD**... GO MDN  
**MicroPro Forum**... GO MICROPRO  
**MicroQuote II**... GO MQQUOTE  
**MicroShopper**... GO MCS  
**Microsearch**... GO MSH  
**Microsoft Forum**... GO MSOFT

# H I G H L I G H T S

## Military Veterans Services. GO VET Money:

Decisionline Money ..... GO DEC  
Money Market Services . GO MMS  
Monthly Charges ..... GO BIL  
Movie Reviewettes..... GO MOVIES  
Multi-Play Games Forum ..... GO GAM-300

## Multi-Player Games:

MegaWars I ..... GO GAM-209  
MegaWars III ..... GO GAM-105  
SeaWar ..... GO GAM-57  
Space War ..... GO GAM-25  
Music Forum . GO MUSICFORUMS  
MUSUS Forum ..... GO MUSUS  
Mutual Funds:  
Donoghue Organization .... GO DON  
Historical Prices..... GO MMM-45  
Liquid Green ..... GO UMC  
Ticker Symbol Lookup . GO MMM-45

## N

## NOAA Weather Wire ..... GO WEA NTSB Cases:

Aviation Rules & Reg..... GO AVR  
NWS Aviation Weather ..... GO AWX  
Naked Eye Astronomy ..... GO NIA  
Natl. Bulletin Board... GO BULLET  
Natl. Issues Forum ..... GO ISSUESFORUM

## National Satirist, The ..... GO KCS National Tourism Citilog GO CITIES

New Adventure ..... GO GAM-59

New Car Showroom ..... GO ATO

## New Services:

What's New ..... GO NEW

## News:

AP Datastream ..... GO SPD-1005  
AP Videotex, Business..... GO APV  
AP Videotex, Entertain..... GO APV  
AP Videotex, Politics..... GO APV  
AP Videotex, Weather..... GO APV  
AP Videotex, World News..... GO APV  
CP Business Info Wire..... GO BIW  
College Press Service..... GO CPS  
Executive News Service ®..... GO ENS  
Government Publications..... GO GPO  
Hollywood Hotline..... GO HOLLYWOOD  
Online Today ..... GO OLT  
Sports News ..... GO SPORTS  
The Business Wire..... GO TBW  
USA Today Update..... GO USA  
News-A-Tron ..... GO NAT

## Newsletters:

AAMSI Communications... GO AAM  
Agri Commodities..... GO ACI  
Alttext Report..... GO ALT  
Commodore..... GO CBM  
Daily Comment..... GO DC  
Digital Research Inc..... GO DRI  
Fedwatch Newsletter..... GO MMS  
Stock Index Plus..... GO FFP  
Newspapers ..... GO NWS  
StL Post-Disp., Business..... GO SPD  
Wash. Post, Editorials..... GO TWP

## NIPSIG:

Natl. Issues Forum ..... GO ISSUESFORUM

## NCNB National Bank ..... GO NCB

Node Abbreviations.... GO LOG-51

## O

OCC Forum ..... GO RADIO  
OP-NET SIG ..... GO SFP-50  
OS9 SIG ..... GO PCS-18  
Official Airline Guides..... GO OAG  
Ohio Scientific SIG..... GO PCS-125  
Olympic Scoreboard..... GO OLY  
Online Computer Connection..... GO RADIO

## Online Index:

Index ..... GO IND

## Online Today ..... GO OLT

## Options:

Historical Prices..... GO MMM-45  
Max Ule's Tickerscreen..... GO TKR  
Quick Way Brokerage..... GO QWK  
Ticker Symbol Lookup . GO MMM-45  
Orch-90 SIG ..... GO ORCH90  
Original Adventure..... GO GAM-8  
OS9 Forum ..... GO OS9

## Outdoor Forum ..... GO OUTDOORFORUM

## P

PDP-11 Forum ..... GO PDP11

PR and Marketing Forum GO PRSIG

Pan Am Travel Guide... GO PANAM

PaperChase..... GO PCH

Pascal:

MUSUS SIG ..... GO MUSUS

Password, Changing:

Changing Password . GO PASSWORD

Personal Computing ..... GO PCS

Personal File Area..... GO FILES

Personal Finance:

Home Management..... GO HOM-80

Personal Menu..... GO MENU

Personality Profile..... GO TMC-17

Political News:

Wash. Post, Politics..... GO TWP-15

Politics:

AP Videotex, Politics..... GO APV

Political Forum ..... GO POLITICS

Portfolio Valuation... GO MMM-55

PowerSoft's XTRA-80... GO PCS-56

Problems:

Feedback to CompuServe... GO FEED

Product Ordering ..... GO ORD

Programmer's SIG ..... GO PROGSIG

PSFS Direct Line Banking . GO PSF

Publications:

Government Publications... GO GPO

## Q

Questions:

Feedback to CompuServe... GO FEED

Quick Quote ..... GO QUOTES

Quick Reference List... GO QUICK

Quick & Reilly ..... GO QWK

Quick Way Brokerage..... GO QWK

Quips:

The National Satirist..... GO KCS

## R

Rapaport Diamond Broker. GO RDC

Rates:

CompuServe Rates..... GO RATES

Ratios:

Value Line Financials..... GO VLINE

Real Estate:

StL Post-Disp., Real Est..... GO SPD

World-Wide Investment Sys. GO WIS

Recipes:

Electronic Gourmet... GO GOURMET

Recreation:

WorldWide Exchange..... GO WWX

Reference:

Directory of Public Officials... GO DPO

Reference Library..... GO LIBRARIES

Religion Forum ..... GO RELIGION

Research:

Educ. Research Forum..... GO EDRESEARCH

Government Publications... GO GPO

InfoText ..... GO IFT

Road Maps:

TravelVision..... GO TRV

RockNet..... GO ROK

## S

Savings-Scan ..... GO SAV

Satire:

The National Satirist..... GO KCS

Science Educ. Forum... GO EDU-13

SCI-FI/Fantasy Forum..... GO SCIFI

Scott Adams' Games..... GO GAM-28

Scramble..... GO GAM-43

SeaWar..... GO GAM-57

Services for Handicapped:

Hand. Users' Database..... GO HUD

Shareholders Freebies..... GO FRE

Shawmut Bank of Boston GO SHW

Shop-at-Home:

Comp-u-store..... GO CUS

Electronic Mall..... GO MALL

New Car Showroom ..... GO ATO

Shop-at-Home..... GO SHOP

Showbizquiz..... GO SHOWBIZ

Social Security Admin.... GO SSA

## Software Publishing Forum..... GO SPUB

## Software Publishing News ..... GO SPUBNEWS

Southeast Bank..... GO SEB

Space SIG ..... GO SPACEFORUM

Space War..... GO GAM-25

Sports:

Auto Racing Forum..... GO RACING

Computer Sports World..... GO CSW

Sports Forum..... GO HOM-110

Sports News ..... GO SPORTS

Sports Weather Forecasts.. GO WEA

Sports News:

AP Datastream ..... GO SPD-1005

Computer Sports World..... GO CSW

Wash. Post, Sports..... GO TWP

Sports Forum..... GO HOM-110

StL Post-Disp., Autos..... GO SPD

StL Post-Disp., Classified.. GO SPD

StL Post-Disp., Jobs..... GO SPD

StL Post-Disp., Real Est... GO SPD

Standard & Poor's... GO MMM-11

State Capital Quiz..... GO TMC-44

Stevens Business Reports . GO SBR

Stocks:

Current Day Quotes..... GO QUOTES

Downloading ..... GO MMM-6

Market Highlights..... GO MMM-55

Portfolio Valuation..... GO MMM-55

Return Analysis ®..... GO MMM-55

Screening ®..... GO MMM-55

Ticker Symbol Lookup . GO MMM-45

Stocks, Bonds:

Historical Pricing..... GO MMM-45

Max Ule's Tickerscreen..... GO TKR

MicroQuote II ..... GO MQQUOTE

Quick Quote..... GO QUOTES

Ticker Retrieval ®..... GO TICKER

Students' Forum..... GO STUFO

Suggestions:

Feedback to CompuServe... GO FEED

Sun and Sand Vacations . GO SAS

## T

Tandy Corp./Radio Shack:

Tandy Newsletter ..... GO TANDY

TRS-80:

Color Computer SIG..... GO COCO

TRS-80 Prof. Forum . GO TRS80PRO

TRS-80 Model 100 SIG..... GO M100SIG

TYMNET Logon Instruct..... GO LOG-11

Tax Laws:

Internal Revenue Service..... GO IRS

Social Security Administration..... GO SSA

Stevens Business Reports .. GO SBR

Teachers:

Educ. Research Forum..... GO EDRESEARCH

Technical Writers and Editors

Forum..... GO WESIG

TeleComm SIG..... GO TELECOMM

Telenet Logon Instruct . GO LOG-20

Telephone Access Numbers:

Access Phone Numbers . GO PHONE

Terminal Software ..... GO PCS-20

Terminal Parameters, Changing:

Changing Terminal Type. GO PROFILE

Texas Instruments Forum..... GO TIFORUM

Texas Instruments News..... GO TINEWS

Text Editors..... GO PCS-20

Text Retrieval:

InfoText ..... GO IFT

The Business Wire..... GO TBW

The College Board..... GO TCB

The Multiple Choice..... GO TMC

Ticker Retrieval ®..... GO TIC

Tickerscreen..... GO TICKER

Touch-Type Tutor..... GO TMC

Travel:

A-Z Hotel..... GO HOTELS

American Express (R) ADVANCE..... GO AXP

Decisionline Travel ..... GO DEC

Florida in February..... GO FIF

National Tourism Citilog... GO CITIES

Official Airline Guides..... GO OAG

Travel Fax ..... GO ESC

Travelshopper..... GO TWA

TravelVision..... GO TRV

Vermont Tourism..... GO VERMONT

West Coast Travel..... GO WCT

WorldWide Exchange..... GO WWX

Travel Fax ..... GO ESC

Travel SIG ..... GO HOM-157

Travel Abroad:

Department of State..... GO STATE

VISA Advisors ..... GO VISA

Travelshopper..... GO TWA

TravelVision..... GO TRV

Trivia:

Showbizquiz..... GO SBO

Trivia Tests ..... GO TMC

The Whiz Quiz..... GO WHIZ

TRS-80 Prof. Forum . GO TRS80PRO

## U

USA Today:

Decisionlines ..... GO DEC

Hotlines..... GO USA

Update..... GO USA

U.S. Entrepreneurs' Network..... GO USEN

U.S. News:

Executive News Service ®..... GO ENS

Fed. Registry Highlights .. GO GPO

StL Post-Disp., U.S. News .. GO SPD

Wash. Post, U.S. News..... GO TWP

Unified Management..... GO UMC

United Amer. Bank..... GO UAB

Unit Trusts:

Max Ule's Tickerscreen..... GO TKR

User Directory..... GO DIRECTORY

## V

Vax Forum..... GO VAXSIG

VAX SIG..... GO VAXSIG

VIDTEX Information..... GO VID

Vacations:

Discover Orlando..... GO ORLANDO

Sun and Sand Vacations..... GO SAS

WorldWide Exchange..... GO WWX

Value Line Financials..... GO VLINE

Value Line Projections..... GO EARNINGS

Vermont Tourism .. GO VERMONT

VISA Advisors ..... GO VISA

## W

Wanted:

Bulletin Board ..... GO BULLET

Wargames:

MegaWars I ..... GO GAM-209

MegaWars III ..... GO GAM-105

Space War ..... GO GAM-25

Wash. Post, Business..... GO TWP-12

Wash. Post, Editorials..... GO TWP

Wash. Post, Financial..... GO TWP

Wash. Post, Gov't News... GO TWP

Wash. Post, Politics..... GO TWP-15

Wash. Post, Sports..... GO TWP

Wash. Post, U.S. News... GO TWP

Wash. Post, World News . GO TWP

Weather:

AP Videotex, Weather..... GO APV

Aviation Weather..... GO AWX

Decisionline Weather..... GO DEC

NOAA Weather Wire..... GO WEA

NWS Aviation Weather..... GO AWX

West Coast Travel..... GO WCT

What's New ..... GO NEW

The Whiz Quiz..... GO WHIZ

Whole Earth Software SIG GO WEC

Wine Forum ..... GO WINEFORUM

WITSIGSIG..... GO WIT

Words of Wit & Wisdom GO WWW

Work-at-Home Forum .. GO WORK

World of Lotus..... GO LOT

# H I G H L I G H T S

## TRAVEL

### GO TRAVEL

#### Discover Orlando

sponsored by Educational Media Services, offers all the information you need to plan a Central Florida trip. Information is included on such world-famous attractions as Disney World, Sea World, the Kennedy Space Center, Weeki Wachee and Busch Gardens.  
GO ORLANDO

#### A-Z Worldwide Hotels

an extensive listing of over 20,000 hotels worldwide with detailed information regarding rates, location, facilities and features. This database is searchable by price, location, features or specific hotel name.  
GO HOTELS

#### Sun and Sand Vacations

provides information and a reservations capability for tours to Florida, the Caribbean and the Bahamas.  
GO SAS

#### TWA Travelshopper

an innovative program that allows consumers direct access to the TWA Pars reservation system. This is the first program that provides reservation capabilities directly to the consumer. With Travelshopper, you can access all fares for all carriers, select the date and time that is most convenient for you, and make your reservations.  
GO TWA

#### TravelVision

a travel service for CompuServe subscribers planning vacations by automobile. TravelVision provides city, regional and state maps of the U.S., Mexico and Canada, as well as a 72-page TravelVision Travel Atlas. Also, auto-cassette tours for specific areas. Plan your own path, or let the TravelVision Routing Service recommend the best way to reach your destination.  
GO TRV

#### Official Airline Guide Electronic Edition

contains all the commercial airline flight schedules operating throughout the world. Also included is detailed fare information for flights operating within North America. The schedule information is revised weekly while the fare information is updated daily.  
GO OAG

#### U.S. Department of State Travel Advisories

a catalog of all worldwide travel advisories and hazardous situations in countries which may affect American citizens.  
GO STATE

#### Worldwide Exchanges

a clearinghouse for exchange, rent and charter of yachts, RVs, condos, vacation homes, private aircraft, powerboats, and bed and breakfast inns throughout the world.  
GO WWW

## REFERENCE/EDUCATION

### GO REFERENCE

#### Grolier's Academic American Encyclopedia

the electronic edition of the printed encyclopedia. Grolier's provides a searchable 21-volume, nine-million word database of over 28,000 subject entries. Written and formatted for videoscreens, Grolier's also provides a customer Feedback and product ordering section. The encyclopedia is now available as a subscription service.  
GO ENCYCLOPEDIA

#### Directory of Public Officials

information about how to contact government and public officials.  
GO DPO

#### U.S. Government Publications

a repository of useful information, this offering categorizes the various booklets available from the U.S. Government on such topics as personal finance, health and fitness and energy conservation. Also featured is current information on the FBI's Ten-Most-Wanted list.  
GO GPO

### Education GO EDUCATION

#### Peterson's College Guide

is a multiple keyword-searchable database of more than 3,000 colleges and universities in the United States. Peterson's Guides will help students, counselors and parents to select an appropriate school according to location, cost, major fields of study and other variables.  
GO PETERSONS

#### Foreign Language Education Forum

is of interest to teachers, students, translators and other subscribers. Provides aids for curriculum and lesson planning, resource listings, tutorials for students, calendar of events, job listings and legislative updates. Covers a variety of languages including French, Spanish, German, Russian, Latin and English as a Second Language.  
GO FLEFORUM

#### Educational Travel Connection

is a menu-driven database of information about working, studying and living abroad. Includes material for teachers, listings of programs for various age groups, information on working abroad and tips on hosting foreign exchange students. A travel trivia contest takes place each week.  
GO ETC

#### Logo Forum

gives educators, students and interested others the chance to exchange ideas about the Logo programming language, computers and technology. The Logo Forum includes Logo procedures, suggestions, questions and answers about Logo, and regular online conferences. Public domain software, a comprehensive resource guide and Logo tutorials are also available.  
GO LOGOFORUM

#### The Publisher Connection

is a multiple key-searchable database designed to provide quick, easy access to educational publishers. Users can describe materials by curriculum area, educational level, instructional approach, audience and other variables. The database then displays a list of companies marketing materials to meet specific needs.  
GO TPC

#### Disabilities Forum

is for those with handicapping conditions and their families as well as those who assist, train, educate and employ the disabled. Includes information on handicaps, issues relating to legislation, education and family life.  
GO DISFORUM

#### Students' Forum

enables students to interact electronically, in conference or on an individual basis, on topics of mutual interest. Teachers of junior high students also may exchange ideas on using the forum to enhance their classroom preparation.  
GO EDU-50

#### Grolier's Academic American Encyclopedia

the electronic edition of the printed encyclopedia. Grolier's provides a searchable 21-volume, nine-million word database of over 28,000 subject entries. Written and formatted for videoscreens, Grolier's also provides a Customer Feedback and Product Ordering section. The encyclopedia is now available as a subscription service.  
GO ENCYCLOPEDIA

#### The College Board

provides information on all aspects of the college selection process, plus information on college planning, adult education and financial aid. A bibliography of College Board publications on these and other college-related topics is also included. A financial aid program can help you determine your eligibility for college aid.  
GO TCB

# COMMUNICATIONS

## Communications GO COM-1

### CB Simulator

a 36-channel CB Simulator that allows any number of users to converse via their individual terminals in open, private or encoded modes. Users can tune to any of the 36 channels and monitor several channels at once.  
GO CB

### CB Society

a frequently updated social interest publication featuring new CB Simulator users, in-depth personal interviews with noteworthy subscribers, CB party reports and social news items about CB users.  
GO CUPCAKE

### EasyPlex

an electronic mail service which enables users to correspond with other users using a message transfer program to address and send letters to other users.  
GO EASYPLEX

### National Bulletin Board

this program is for posting public notices and personal classified advertisements. The user can search through the bulletins by category.  
GO BULLETIN

### User Directory

a list of subscribers who have chosen to leave their name and user number as well as other personal information such as terminal type, city of residence and personal interests.  
GO USERS

## Forums GO FORUMS

### Auto Racing Forum

a forum dealing with all forms of amateur and professional auto racing.  
GO RACING

### CBers Forum

a general topic forum dedicated to the dialogs of the many CB Simulator users.  
GO CBIG

### Religion Forum

a forum dedicated to dialogue and information exchange concerning all religions of the world as well as religious experience generally.  
GO RELIGION

### RockNet

a database with information about MTV happenings and upcoming rock concerts, album reviews and interviews with rock musicians. RockNet's forum offers a way to exchange messages with other rock music fans.  
GO ROCK

### Sci-Fi Forum

a forum dedicated to those interested in science-fiction and fantasy. Whether you're interested in the latest *Doctor Who* or *Star Trek* information, or just want to take part in a conference with a famous writer, you'll enjoy the SCI-FI Forum.  
GO SCI-FI

### Space Forum

a forum for users interested in all aspects of space exploration, travel, colonization, research and development and related activities. NASA news releases are posted regularly in this bulletin board.  
GO SPACE

### Sports

a forum dedicated to discussion of all the major sports and sporting events.  
GO HOM-110

### Travel Forum

a forum for discussing vacationing and travel throughout the world. Users contribute experiences and advice about places to go and things to do and see. Find the best hamburger stand in Tunisia through the adventures of the Travel Forum and its members.  
GO HOM-157

### Games Forum

a forum dedicated to dialogue about online games and game playing including walk-through and hints to mastering the more challenging adventure and maze, role-playing and multi-player games.  
GO GAMESIG

### Good Earth

a forum dedicated to discussing home-steading, gardening, folkways, home management, alternative life styles and energy conservation.  
GO HOM-145

### Ham Radio Operators Network

a forum dedicated to discussions of private radio operators.  
GO HAMNET

### Literary

a forum dedicated to the discussion of writing and publishing for both the professional and amateur. Frequent conferences focus on poetry, jokes and screen writing.  
GO HOM-136

### Music

a forum for discussing classical, jazz, popular, blues, country & western, rock and foreign music. This group also has an instrument exchange section.  
GO HOM-150

### WITSIG

a forum dedicated to expressing humor through satire, parody, jokes, facetious dialog, skits and short fiction.  
GO WIT

### Orchestra 90

a forum dedicated to computer based music composition. This includes the Radio Shack Orchestra 90 software series.  
GO PCS-50

# ELECTRONIC MALL/SHOPPING

## Shopping GO SHOPPING

### New Car Showroom

a comparison shopping guide for consumers making new car purchases. Examine and compare passenger car features and specifications. Over 250 foreign and domestic cars are compared in price, standard and optional features and technical specifications, such as fuel economy and roominess.  
GO ATO

### Electronic Mall

provides easy ordering of thousands of products and services from brand name merchants and contains hundreds of pages of helpful information from each and every company represented. The Electronic Mall contains a variety of shopping areas, each one representing a particular type of product and group of merchants. Type "O" for easy ordering in the mall.  
GO MALL

### Comp-u-store

a discount home shopping catalog service listing nearly 60,000 name-brand, durable consumer items such as watches, TVs, radios, VCRs, kitchen appliances, music and sporting equipment, and gourmet foods. Offered by CompuCard International Inc. of Stamford, Conn., this service requires membership, and purchases are payable to major credit cards. An online auction is a weekly feature.  
GO CUS

## NEWS/WEATHER/SPORTS

## GO NEWS

**Associated Press Viewdata Wire**

a continuously updated news wire service reporting on world, national and regional events in all sectors of activity.

GO APV

**Executive News Service**

Executive News Service is the unique electronic clipping service which monitors every Associated Press state and national news wire for stories of interest to you. Stories containing words or phrases you specify are clipped as they come across the wires and held in electronic folders for you to review at your convenience.

GO ENS

**Online Today Electronic Edition**

an electronic extension of *Online Today* magazine. Contains daily-updated computer and

videotex industry news; reviews of hardware, software and books; new product announcements; and a direct link to *Online Today* advertisers.

GO ONLINE

**The Washington Post Electronic Newsletter**

is a daily newsletter keying in on the political and governmental scene on Capitol Hill. Regular features include The Federal Report, Mike Causey's Federal Diary and the listings of committee hearings on the Hill. The Electronic Post also includes a regular national political report.

GO TWP

**USA TODAY Update**

USA TODAY Update is a news service developed by the Gannett Company, publishers of USA TODAY. Late-breaking information is gathered from hundreds of national and in-

ternational sources and is condensed into executive summaries. Reports for specific industries such as telecommunications and banking are provided daily.

GO USA

**NOAA Weather Wire**

a continuously updated weather reporting wire service providing aviation, marine and public weather conditions in each state of the country.

GO WEATHER

**Hollywood Hotline**

a news and information service of noteworthy events in motion pictures, television programs and music recordings. Also included are ratings of movies, TV shows, LPs and video-cassettes. Short news items highlight television shows, describe legal battles and profile personalities.

GO HOLLYWOOD

## ENTERTAINMENT/GAMES

## Games GO GAMES

**Astrology Calculator**

calculates everything you'll need to know about planetary formations based on your birth date, time, birthplace and time zone. The calculator is easy to use and provides information that might otherwise remain forever a mystery.

GO ASTROLOGY

**BlackDragon**

enter a multilevel maze labyrinth filled with treasures, traps, pits and deadly creatures to conquer. This fantasy role-playing game lets you accumulate gold treasures which, when converted to "experience points," add to the

strength you need to conquer the evil Arch Demon . . . and thus win the game.

GO BLACKDRAGON

**CastleQuest**

is a game of adventure, suspense and mystery. Players venture through a castle, attempt to kill the master and collect treasures and points.

GO CQUEST

**Flying Buffalo**

four exciting games that include a slight twist: they're played via CompuServe's electronic mail service as opposed to its interactive online system. Heroic Fantasy is a role-playing fantasy game; Galactic Conflict is an interstellar war game; Feudal Lords is a pow-

er strategy simulation game; and StarWeb is a multi-player space game. Send in instructions for your moves against your opponents; the results of those moves will then be sent to you.

GO BUFFALO

**SeaWar**

Adventure on the high seas . . . You're the commander of your ship as you try to protect it on an enemy-infested ocean, scoring points as you destroy enemy commanders. This multi-player war game combines the elements of war-room strategy and battleship strength, making it simple enough for novice game players and challenging enough for experienced game users.

GO SEAWAR

## BUSINESS/OTHER INTERESTS

## Aviation Services GO AVIATION

**Aviation Safety Institute**

provides information on a variety of safety-related topics. Topics include Service Difficulty Reports and Hazard Reports, along with articles on flight operations, human factors and safety tips. The information in this electronic newsletter is updated twice a month.

GO ASI

**Aviation Forum (AVSIG)**

a discussion forum for members of the aviation community. Currently has more than 3,000 members who can leave and retrieve messages under 10 different topics including air traffic control, home/experimental aircraft and meteorology. Also included are databases of software programs to run on home

computers and lists of National Weather Service word abbreviations.

GO AVSIG

**Model Aviation Forum**

for those with an interest in model airplanes and model railroads.

GO MODELNET

**Aviation Weather**

includes hourly reports, terminal forecasts, previous hourly reports, winds aloft forecasts, NOTAMS, PIREPS, SIGMETS, AIRMETS, area forecasts and radar summaries. Reports are updated continuously as information is received from the National Weather Service.

GO AWWX

**Flight Planning**

is available in several sophisticated programs from EMI Aerodata. Wind-corrected flight plans between any two points in the continental United States can be requested by using RNAV direct routing, VOR to VOR, or by any user-specified route using NAVAIDS, intersections and airways. Database includes 6,000 airports and NAVAIDS. All flight plans provide accurate estimates of trip time and fuel burn, based on your particular aircraft performance and include a complete weather briefing. EMI also provides a variety of weather briefing products and a text-format radar map.

GO EMI

## MONEY MATTERS AND MARKETS

**Market Quotes/Highlights GO MMM****MicroQuote II**

provides historical market information for more than 50,000 stocks, bonds, market indices, mutual funds, government issues and options traded on U.S. and Canadian exchanges. Historical prices and volumes are available for most stocks back to 1/1/1974, and historical dividends are available back to 1/1/1968. MicroQuote II and its features listed below can be found by typing GO QUOTES

**Quick Quote**

provides current-day quotes for 9,000 stocks. Quotes include the high, low, closing, volume and net change figures for the NYSE, AMEX and many OTC securities. Advanced features include a search by company name if the ticker symbol is not known, and the capability of reading in a file to check multiple securities.

**Prices (PRICE)**

provides price quotations for any specified time period for a specified security. Price information includes the date, volume (in 100s), high/ask, low/bid and close.

**Multiple Price Quotes (QUOTES)**

provides a price quote for a specified day for one or more securities (maximum of 500 securities). A quote would include ticker symbol, volume, high/ask, low/bid, close/avg and CUSIP number.

**Dividends, Bond Interest Payments, and Splits (DIVI)**

offers dividend or distribution information and includes the ex-date, record date, payment date, distribution type and rate.

**Summary Statistics (STATS)**

provides descriptive statistics for an issue over a specified time period. The high, low, close, high close, low close, volume, mean and standard deviation are reported.

**Examine an Issue in Detail (EXAMINE)**

displays descriptive information for a specified issue (i.e., Standard & Poor's rating, shares outstanding, beta factor, latest bid, pricing and dividend history, Moody's rating, bond coupon rate, yield, maturity date or open interest).

**Bonds Listing**

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**Options Profile**

lists all options outstanding for any company you choose. It lists the day end closing prices for all options trading on that company.

**Search for CUSIPs and Ticker Symbols (CUSIP)**

searches and lists specified security issues by company name. Also lists all the issues for a given issuer.

**Market Reports (MKTHIGH)**

provides up to 19 daily market reports, such as stocks up three, four or five days in a row, volume leaders, 20 most active stocks, 20 largest gains/losses, etc.

**Securities Screening**

(available in the Executive Service). Enter your own investment criterion and see which securities meet your test. You can select all Stocks, Bonds, Options, or Mutual Funds which satisfy your criterion. Search on items including latest price, exchange, beta, earnings, or SIC code. Useful whether you are buying into, or selling short. Great for picking bonds with specific maturity dates and yield targets.

**Return Analysis**

(available in the Executive Service). What is the "Holding Period Return" on your portfolio? What is the annualized rate of return? What has been the performance during comparable historical time periods of holdings which you are considering to buy? This program calculates both the holding period and annualized rate of return on the stocks you choose to analyze. You can include or exclude dividends from the return calculation. Excellent for comparing performance relative to a market index.

**Portfolio Summary (PORT)**

produces a valuation report on a portfolio, displaying current values and gains or losses.

**Commodity Quotes**

historical and same-day price, volume and open interest information.

**Company Reports GO MMM****Ticker Retrieval**

(available in the Executive Service). Allows you to select a company first (the object) and then you can select which analysis you wish to see on that company. This order keeps you from having to enter a ticker symbol over again for each analysis you'd like to run. GO TICKER

**Disclosure II**

all publicly-owned companies file 10K Reports with the Securities and Exchange Commission. The Disclosure II database, compiled from those reports and updated weekly, includes financial, product line and management data for more than 9,500 firms. GO MMM

**Standard & Poor's (S&P)**

provides up-to-date descriptive and financial information on more than 3,000 companies. Information is presented in categories such as Business Summary, New Product Developments, Net Income, Product/Service Line Breakdown, Net Sales Figures, Three-year EPS Data and Five-year EPS Growth Rate. GO MMM-11

**Value Line Data Base II**

provides current and historical fundamental financial data that allows you to analyze the performance of more than 1,700 companies which collectively represent 95 percent of the dollar value of stocks traded on major U.S. exchanges. This information is available back to 1969.

GO VLINE

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GO FRE

**Banking and Brokerage Services****Quick Way**

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GO QWK

**Tickerscreen**

is a financial information service of the discount brokerage Max Ule & Co. It offers closing NYSE prices commission comparisons, and direct order entry of buy and sell orders for Max Ule clients.

GO TKR

**Home Banking**

allows you to pay your bills, transfer funds and check your account balances from the comfort of your home. Convenient and innovative banking services are available to customers of Huntington National Bank of Columbus, Shawmut Bank of Boston and United American Bank of Memphis.

GO BANK

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includes access to a money market fund offering high yields, free checking and safety of principal. Authorized Liquid Green Trust customers can check their account balances and initiate ACH cash transfers to and from their local banks.

GO UMC

**Earnings Projections****I/B/E/S**

the Institutional Brokers' Estimate System offers monthly earnings per share estimates for the stock issues of more than 3,000 companies. Estimates represent a consensus of more than 1,200 analysts from 70 institutional sources and are updated weekly with report changes.

GO EARNINGS

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**Lawrence and Lee, playwrights** ("Inherit the Wind," "Auntie Mame," "First Monday in October," and many other Broadway hits, motion pictures and teleplays) **and educators** (professors of Advanced Playwriting at UCLA and USC).

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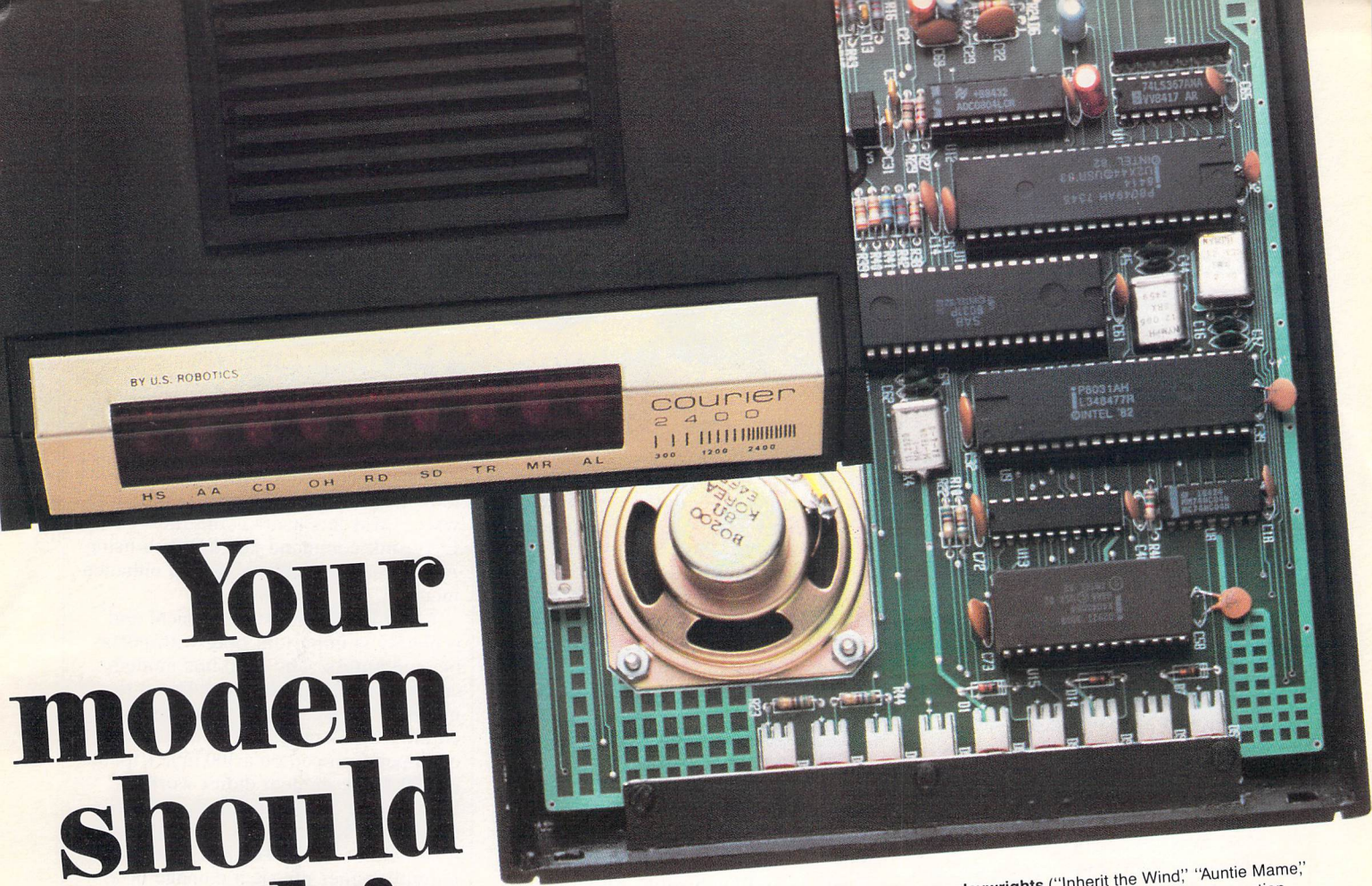
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## Quadram's Asher Integrates Communications Hardware and Software

Quadram Communications Group  
1009 Mansell Rd.  
Roswell, GA 30076  
800/334-9339

**Computers:** IBM PC and compatibles.

**Operating Systems:** PC-DOS or MS-DOS 2.0 or higher.

**Media:** Two double-sided, double-density floppy drives or one floppy drive and a hard disk.

**Copy Protection:** None.

**Required Peripherals:** Touchtone telephone line (not designed to work with pulse dialing).

**Other Requirements:** RAM not specified by manufacturer; requires 339K for DOS, Asher and Asherlink; additional RAM required for concurrent programs; recommended minimum 640K.

**Optional Items:** None.

**System used for test:** 640K Compaq Portable Computer with two double-sided, double-density drives; DOS 2.0.

**List Prices:** \$695 for 1200 bps; \$995 for 2400 bps.

*Reviewed by Harry Green*

An unfulfilled promise of the automated office is that all workers will have integrated workstations to equip them with the productivity-enhancing tools of telecommunications and computers. So far, the integrated workstation has been more enticement than reality. Workers' needs are not uniform, computers are not standardized, and the variety of software is almost endless.

Asher is designed to solve these problems. It is intended to enhance productivity without cluttering desks with separate telephones, calendars and personal computers. Asher is a system consisting of four elements: a combined internal modem and electronic telephone, a concurrent windowing operating system, desk management software and a telecommunications program. It is available in 300, 1200, and 2400 bps versions.

The desk management software is similar to other products and includes an on-screen calendar, speed dialing, name and address list and note pad. These

are selected from a continuously displayed menu while in the Asher mode.

One menu choice is modem mode, which shifts to Asherlink, the telecommunications software that operates concurrently. Asherlink also is similar to other such programs. It provides automatic logons and menu-selected dialing. One especially convenient feature is its method of setting communications parameters while online.

The modem is a full-sized plug-in board that contains a two-line electronic telephone. The line is chosen from the software's menu with a function key. Manual dialing is permitted as is speed dialing in either voice or modem modes. If you're communicating with another Asher station, you can switch between voice and data. Asher claims to provide simultaneous voice and data. However, unlike many PBX workstations, this is possible only by using one line for data and another for voice.

The concurrent windowing (AsherDOS) software allows operating programs simultaneously in different memory partitions. Asherlink operates in the background, Asher in the foreground's window 1, and as many as four more programs of your choice in the foreground. Foreground programs are selected and loaded with a number key, so each program is instantaneously available at a keystroke.

In theory, Asher turns a personal computer into a versatile workstation, overcoming the problems of separate telephone, modem and computer. However, it has drawbacks. The first is the memory limitation. Asherlink and Asher, together with DOS, require 339K, which leaves 301K of a 640K computer for application programs. For some people this is enough, but the programs I use most frequently, Lotus 1-2-3 and Microsoft Word, are too large to fit with Asher.

A second drawback is the inflexibility of the telecommunications system. Hoping to conserve memory, I tried operating the modem with PC-Talk III, but it wouldn't work. I also tried the system on Western Union's EasyLink electronic mail, which supports 2400 bps. EasyLink works with Asherlink, but

Asher doesn't work with Western Union's Instant Mail Manager (IMM) software. IMM lets users avoid the EasyLink command language, so using Asher means foregoing IMM's enhancements.

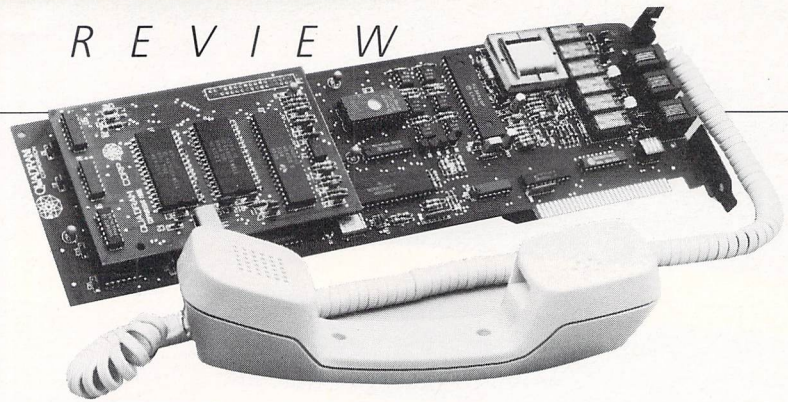
A third problem is mechanical and probably is important only with portable computers. The 2400-bps modem contains a plug-in daughter board that's mounted on a cantilever and is supported only by its plug. I took my Asher-equipped Compaq on a 300 mile trip, after which the modem didn't work because the 2400-bps board had shaken from its socket. After it was replaced, it still didn't work. The problem was apparently either physical damage or a heat-related failure.

Other problems include an appointment alarm that can be turned off only while in the Asher program, which is disconcerting when using the modem and the alarm goes off. The electronic telephone also has drawbacks. A distinct background hum probably results from insufficient filtering. It's easy to leave the receiver off-hook because replacing the handset in the cradle isn't enough; you must also press a function key. Another problem is that the telephone doesn't work with the computer turned off. Unless a conventional telephone is attached, the line won't ring with the computer off. Furthermore, Asher won't work with rotary dial lines; only tone dialing is supported.

Despite the drawbacks, there undoubtedly are applications where Asher's features will be advantageous. It's easy to install. Its manual is about average — well written but with error code explanations omitted. The concurrent windowing is an advantage, although I'd want at least a megabyte of memory. Until larger computers are commonplace, Asher may be ahead of its time.

*Harry Green is president of Pacific Netcom Inc., a Portland, Ore., firm that consults with businesses on using office automation and telecommunications to improve productivity. His CompuServe User ID number is 70007,431.*

GO EBB or circle 12 on the Reader Service Form.



## RCA's All-Purpose Communications Terminal

RCA Data Communications Products  
New Holland Ave.  
P.O. Box 3140  
Lancaster, PA 17604-3140  
717/295-6000 or 800/233-0187

**Computers:** RCA VP5801 terminal.  
**Operating System:** Menu-selectable user control.

**Features:** 58 key upper/lowercase alphanumeric typewriter keyboard with displayed lowercase descenders, includes two user keys to initiate special terminal functions and 16-key numeric keypad with four special function keys; Bell 212A compatible 1200/300/110-baud internal modem for auto-dial, auto-answer direct connection or optional acoustic coupler; non-volatile RAM (up to 2,500 characters) with 48-hour minimum internal power backup; nine user-definable terminal personalities plus one RCA-defined default personality; NTSC-compatible composite monochrome display output with video and RF-modulated (channel 3 or 4) output connectors; parallel Centronics-type printer interface; RS-232 expansion interface with DB25 connector.

**Options:** VP4801 model terminal with Bell 103 compatible 300/110-baud internal modem; VP3001AC acoustic coupler; VP4012 12-inch data display monitor.

**Model Tested:** RCA VP5801 communications terminal with built-in 1200-baud modem and equipped with RCA VP4012 12-inch data display monitor.

**Base Prices:** \$798 with 300/1200-baud modem; \$498 with 300-baud modem; \$199 for optional RCA monitor.

*Reviewed by Joe Farace*

A recent survey conducted by an Apple Pi group in my area showed that telecommunications is the overwhelming purpose for which most members use their microcomputers. I was surprised, too! Since I've grown increasingly involved in telecommunications, I was glad to work with the new VP5801 terminal from RCA's All Purpose Terminal (APT) family.

With just a brief glance at the documentation, it took less than five minutes to get the terminal out of its shipping box and set up. Connection to the telephone



line is accomplished by plugging a modular cable into the back of the terminal. Although the instruction manual shows the terminal connected to a telephone set, I routed the cable directly to a modular wall jack, which worked fine. The terminal also could share a line with a standard telephone set by interposing a "Y" connector in the line. For use in locations lacking modular telephone jacks, a terminal connector is provided for RCA's optional acoustic coupler.

The terminal's keyboard is attractive, and extensive use of metal components gives it a solid, quality feel. A separate numeric keypad incorporating four function keys is located on the right of the QWERTY keyboard.

Besides the manual, which covers RCA's complete line of communications terminals, there is a little book called the "Quick Guide." Users can do themselves a favor by skipping the manual and going straight to this easy-to-read, 14-page booklet. It contains everything needed to prepare the terminal for telecommunicating. The booklet's last four pages are a troubleshooting guide that solves most problems a new user is likely to encounter.

Setting up the auto-dial and logon procedures, often called macros, is easier with the RCA terminal than with any microcomputer communications software I've used. Within 15 minutes, I had established parameters for 13 databases, public information services and bulletin boards. Each remote service is assigned a separate letter of the alphabet. While that is a limit of 26 entries, it should be enough for most people.

Unfortunately, there is no automatic redialing feature for connections that don't complete. The terminal provides audio monitoring of call progression, but requires manual handling of things like busy signals. If you encounter a busy signal, you can use an undocumented feature to quickly disconnect and redial. The standard reset command is "Shift-Control-Escape", but on getting a busy

signal, striking any key causes a disconnect. I use the space bar (because it is bigger) and then press the letter of the next service I want to call. It is much faster than the "official" method.

Since each remote service can have its own requirements, the terminal may be set up in many configurations. The terminal can provide 40 or 80 characters per line, and this must be specified during the easy setup procedure. RCA recommends the 40-column setting when a standard television set is used as a display. An RF modulator for channels 3 and 4 is built in, and all cables for connecting a television set are included.

The resolution of the optional RCA monitor at 80 characters per line is only a little better than a standard television, so I used it only in 40-column mode. As a former Apple II user, this didn't bother me. If it is important for you to have 80-character lines, you'll want to invest in a higher resolution NTSC composite-input monitor.

*[Editor's Note: RCA representatives have advised Online Today that a new character generator is now being shipped in the All Purpose Terminal and corrects resolution problems in 80-character displays. At press time, however, the new terminal was not available for testing.]*

A quirk I encountered may be monitor-related. One BBS that I regularly visit displays its text in reverse. After viewing for a short time, the screen image distorts, and no amount of tweaking monitor controls alleviates the problem.

The terminal doesn't limit you to transient images on a video display. Any printer with a Centronics-type parallel interface will work with the VP5801. Data can be printed while being received from or transmitted to the remote computer, or you can use a "page dump" command to print data appearing on the display.

I honestly didn't expect to like the VP5801 terminal because I didn't know how it would fit into my personal computing universe, but its computer-like looks, solid construction and ease of use quickly won me over. If you've thought about purchasing another computer, take a look at your applications. As a telecommunicator, you might need only a terminal, and RCA's All Purpose Terminal may be just the thing.

*Joe Farace is a writer and photographer from Denver, Colo. He is a contributing editor of PhotoMethods magazine and his reviews of Macintosh software will appear in a forthcoming book from Arrays Inc.*

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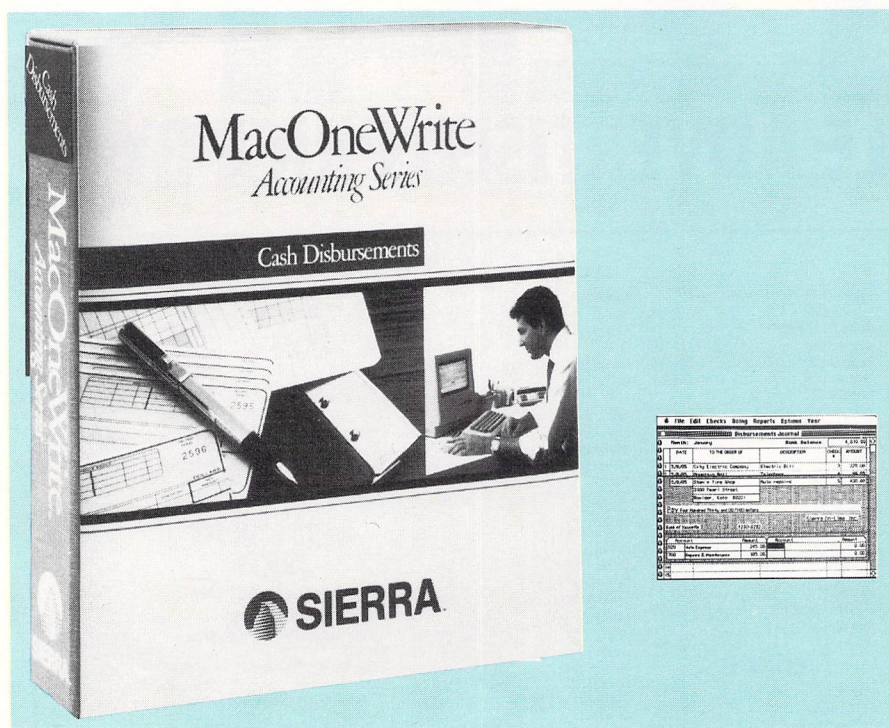
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## MacOneWrite Cash Disbursements:

### First Module in New Accounting Series

Sierra On-Line Inc.  
P.O. Box 485  
Coarsegold, CA 93614  
209/683-6858

**Computers:** 512K Apple Macintosh.

**Operating System:** MacDOS.

**Media:** Standard Macintosh disk.

**Copy Protection:** Program is copy protected; backups may be used, but the original disk is necessary to create a new functional data disk for each new year's data. One backup disk is included; after warranty expires, replacement disk may be purchased for \$10 with return of failed disk.

**Required Peripherals:** None.

**Optional Items:** Printer (highly recommended).

**System used for test:** 512K Macintosh, Apple Imagewriter printer.

**Retail Price:** \$245

*Reviewed by Cheryl Peterson*

Sierra On-Line, for years a purveyor of games and home productivity software, has moved into the business field with this first installment of an integrated accounting package. Although Sierra plans to release general ledger, payroll and accounts receivable modules, the cash disbursements module must stand on its

own until the others appear.

A local accountant who examined the package thought it would be perfect for someone unfamiliar with computers and already using the one-write pegboard accounting method. Since the pegboard method is used by many small business persons who don't want complicated accounting methods, it is appropriate that MacOneWrite uses an uncomplicated computer.

A few features really recommend the package. Unlike many other accounting packages, MacOneWrite allows updating the vendor list to include new vendors as you are writing a check. The screen displays a blank check and the journal entry form on the screen simultaneously, with the check foremost on the display. Filling in information on the check puts the data into the journal as well, so data need not be entered twice. Checks are numbered consecutively, and the date is inserted automatically. Both of these can be overridden merely by placing the cursor on information to be changed and typing over it.

The program uses the standard check form provided by many third party vendors. These tractor-fed preprinted checks are inexpensive and readily available.

With MacOneWrite, checks can be printed individually as they're entered, or they can be flagged for batch processing and printed just before a session concludes. Should you have problems

aligning the checks and waste one, it is easy to void the ruined check and print another. MacOneWrite will even automatically increment the check number for you.

The error trapping is not only effective, it is informative. If you attempt to write a check against a nonexistent account, the program tells you and gives you the options of viewing the accounts list and then adding a new account, viewing information on existing accounts, choosing an existing account or deleting an account. If you choose an existing account, the program enters its name and number into the worksheet. Entering a nonexistent vendor draws a similar response. Entering dates inconsistent with the month in which you are working triggers a warning message since each month's data is stored in a separate file.

Provisions for handwritten checks, bank charges and interest earned also are included. The program will help reconcile your checking account and print a report of cleared and uncleared items.

The report forms used are standard but have some flexibility to allow for individual user's needs. The Chart of Accounts, Income Statements and Balance Sheets can be printed to the screen or to a printer with a couple mouse clicks. A journal of all transactions can be printed, and the information can be sorted three ways. An alphabetic vendor address list also is available. When information is output to the screen, it prints at a rate slightly faster than most people can read. Since it appears one page at a time though, this isn't a problem. The scrolling in windows is quite fast and is controlled with the mouse.

The documentation for MacOneWrite looks marvelous. Illustrations have been printed with a method that makes them stand out on the page. While most sample data are useless, the Chart of Accounts on the disk could be expanded to suit most small businesses. The expense categories include as separate items all the deductions currently considered valid by the federal government. A glossary of accounting terms, a full index and a table of contents make finding information easy. While the program makes good use of the Macintosh's pull-down windows, the few special key shortcut combinations are listed separately in the appendix section.

*Cheryl Peterson, a free-lance writer from Miami Beach, Fla., writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.*

GO EBB or circle 16 on the Reader Service Form.

**Insight2:****An Expert System With Access To Pascal And dBase II**

Level Five Research Inc.  
4980 South A-1-A  
Melbourne Beach, FL 32951  
305/729-9046

**Computers:** IBM PC, PC-XT, PC-AT and all true compatibles.

**Operating Systems:** PC-DOS and MS-DOS, version 2.0 or higher.

**Media:** Two diskette drives or one diskette drive and a hard disk drive required.

**Copy Protection:** None.

**Required Peripherals:** None.

**Other Requirements:** 256K RAM required but 512K recommended.

**Optional Items:** Pascal compiler.

**System used for test:** 640K IBM PC, 20MB hard disk, 360K double-sided, double-density diskette drive, Epson FX-80+ printer; running PC-DOS 2.1.

**List Price:** \$485

*Reviewed by James Moran*

Artificial Intelligence has become one of the buzzwords in computer applications. Almost daily, there are reports of new AI "breakthroughs." Although we may be no closer to true AI now than we were 20 years ago, "expert systems" have become a reality. Expert systems have been defined as kinds of AI subsets. They depend on the knowledge of experts to draw certain conclusions based on a core of knowledge supplied by the developer. Insight2 is a knowledge system from which users can develop expert systems to perform tasks ranging from weather predictions to stock market predictions.

Installation consists of copying the distribution diskettes to working copies or a hard disk. Once this simple procedure is completed, the system may be activated. To do any effective work, however, Insight2 must be pointed to a knowledge base consisting of Insight files that contain user created goals, thresholds necessary for conclusions, confidence statements and rules that support the goals. For certain applications some elements may be deleted or others added, but the four cited would be typical.

A simple example of a knowledge base might segregate fish from mammals, depending on responses elicited from a user. The goals for the knowledge base would be (1) the animal is a fish or (2) the animal is a mammal. Rules then must

be formulated to support those goals. Another way to think about rules is to consider them facts. The rules for a fish would be that (1) the animal lives in water and (2) the animal breathes water. For a mammal, (1) the animal has body hair and (2) the animal is warm-blooded.

A user may not always be sure about the response entered, and that's where thresholds come into play. A threshold is the percentage of confidence required to reach a conclusion. For instance, if a user describes an animal as water-breathing but is less than 40 percent sure about that fact, the expert system could not reach a valid conclusion. This example is greatly simplified, but it does describe how an expert system might be constructed with Insight2.

For real-world processing, knowledge bases become complicated. Insight2 accommodates that fact with a special group of reports that traces sets of rules constructed. A typical report displays all rules that can reach the same conclusion, all conclusions reached at any particular point in processing, all conclusions reached so far, and all facts and values obtained or inferred. If you're beginning to get the idea that an expert system is complicated, you're right. Constructing these systems is not a job for a casual user. However, using them is.

A primary shortcoming in expert systems can be their failure to interface with existing systems and data. Without such an interface, large volumes of data have to be rekeyed in a format usable by the knowledge base. Insight2 alleviates this problem by supplying a Pascal programming environment that's a special subset of the Pascal language. The Insight2 version contains special extensions to support direct access to dBase II files. It also contains an editor that's a WordStar work-alike, plus a database editor that allows direct creation and maintenance of dBase II read- or write-compatible files. Finally, Insight2 can activate any program in any other language with an internal command from the knowledge base. A method also is available for passing parameters to an external program.

Insight2 is an awesome system. Although its price will make some potential users blanch, it's really a steal. I doubt there are many mainframe systems that have the capabilities of this package. They certainly aren't available at this price level. Low-end expert systems for minis or mainframes start at \$6,000, an amount that should make some large companies seriously consider

purchasing an Insight2 package and a microcomputer to run it. Until something better comes along, this may well be the best expert system generator on the market.

*James Moran is the editor of Compu-Syn, a syndicated news service that specializes in computers and robotics.*

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## Memory Minder

### Analyzes Diskette Drive Performance

J&M Systems Ltd.  
15100-A Central Ave., S.E.  
Albuquerque, NM 87123  
505/292-4182

**Computers:** IBM PC, PC-XT and many compatibles; versions also available for IBM PCjr.; Kaypro 2, 4, 10, II and IV; TRS-80 Model III/4 and Color Computer.

**Operating Systems:** For PC-DOS or MS-DOS computers, Memory Minder is self-booting with its own operating system.

**Media:** One single-sided or double-sided floppy disk drive required.

**Copy Protection:** Uncopyable on PC-DOS or MS-DOS computers; replacement program and digital diagnostic diskettes available at extra cost.

**Required Peripherals:** None.

**Other Requirements:** Manufacturer does not state memory requirements; program should run with any size memory standard for the microcomputer being tested.

**Optional Items:** Printer; additional diskette drives.

**System used for test:** 640K Compaq Deskpro (Model 2) with two 360K diskette drives, Amdek Color 700 monitor and Epson MX-80 printer.

**List Prices:** IBM PC and compatibles and PCjr, \$79 for single-sided or \$99 for double-sided. Kaypro models, \$99 for double-sided only. TRS-80 III/4, \$79 for single-sided, \$89 for double-sided, \$129 for double-sided 80-track and \$159 for 40- and 80-track double-sided combination packs. Color Computer, \$79 for single-sided and \$99 for double-sided. All prices include a standard Dysan Digital Diagnostic Diskette.

*Reviewed by Ernest E. Mau*

Most programs for testing diskette drives without the aid of a service technician write and read data to and from a user's own diskette or use a selected few tracks on their distribution diskettes. Such tests verify that a drive can write and read the same data back again. However, many lack a "standard" by which absolute performance can be gauged and may not indicate how well drives meet design specifications or how compatible drives may be for interchanging diskettes.

Memory Minder includes a standard

Dysan Digital Diagnostic Diskette on which all tests are run. This is the so-called "alignment diskette" used by competent service technicians. The Memory Minder program is on a separate diskette and provides several tests. The reviewed version (release 1.02) for IBM PC and compatible computers tests diskette clamping, spindle speed, alignment sensitivity, head alignment, head rotation and directional seeking. Versions for other machines may add tests such as index-hole timing for the TRS-80 III/4.

This review hasn't enough space to describe what the tests do or how they work, but Memory Minder's manual does detail them. It also helps interpret displays and printouts, describes results indicating the need for drive adjustments and so on.

The program is easy to use. It has its own operating system and must be self-booted (warm or cold). This assumes the boot drive is in good enough condition to load the program. Once at the main menu, the program diskette is removed, and the Digital Diagnostic Diskette is inserted into the drive being tested. From there, it's just a matter of making menu selections and observing displayed results.

The double-sided Memory Minder reviewed accommodates four drives, numbered 0 through 3, and two heads, numbered 0 and 1. Each test runs on any drive and head combination, so my dual-drive, double-sided system requires four passes for heads 0 and 1 on drives 0 and 1.

The manual's claim that Memory Minder checks head alignment, motor speed, azimuth and hysteresis in 30 seconds is misleading. A full-function "quick test" in Memory Minder took an average 108 seconds for each drive/head combination. While an individual test might complete within 30 seconds, a full series of quick and follow-up individual function tests on four drive and head combinations using multiple options sometimes afforded within a test (such as checking inner, middle and outer tracks) took almost 30 minutes.

The quick test reports results as "good" (well within specifications), "fair" (marginally within specifications), or "poor" (needing adjustment or repair) for 12 test and option combinations. Other individual tests display (and can print) various graphics such as a multiple-bar histogram for alignment sensitivity. Drive performance is easily gauged by looking at histogram symmetry, bar height or marker positioning. Al-

though the quick test shows all my Deskpro drive/head combinations are "good" on all counts, the in-depth tests show that drive 1 head 1 has a slight asymmetry in the alignment-sensitivity histogram and a 1.0-mil shift in head alignment. Clamping, head rotation and directional seeking are on target. The slight discrepancy isn't enough to warrant adjustment or endanger data integrity, but I'll be watching for long-term drifting that could indicate latent problems.

Memory Minder also provides an analog alignment aid for drive troubleshooting and repair. However, users not experienced at drive repair should not attempt adjustments. Without specific knowledge about a particular drive, damage could be done to the drive and to data by meddling with the mechanics. While the program cannot do damage by itself, casual users should keep their fingers out of the works.

I couldn't make Memory Minder load into my Compaq Portable Computer, getting a "diskette error" message even though the drives were professionally aligned two months ago, pass all other diagnostic programs and load any other distribution diskette I try. However, it did run successfully on three portables at local computer stores. The supplier thinks the problem might be an incompatibility with my upgrade to Compaq's revision E ROMs.

One thing missing is a write-then-read test. While the ability to read prerecorded data is checked by Memory Minder, that's no guarantee that the write electronics are working properly. Although most write failures are readily apparent during normal operation, it wouldn't hurt to run Memory Minder with some other write-then-read diagnostic for an extra measure of protection.

I intend to run at least Memory Minder's quick test weekly on my Deskpro as a safeguard against insidious drive problems that could wipe out valuable data. I just wish I could get it working on my modified portable.

*Ernest E. Mau, a full-time free-lance writer and Online Today reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 200 articles on microcomputer products and applications.*

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# The Unpuzzler

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## ACROSS

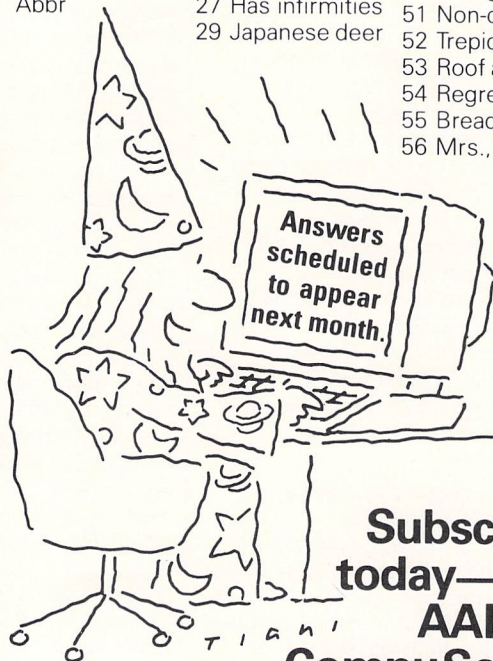
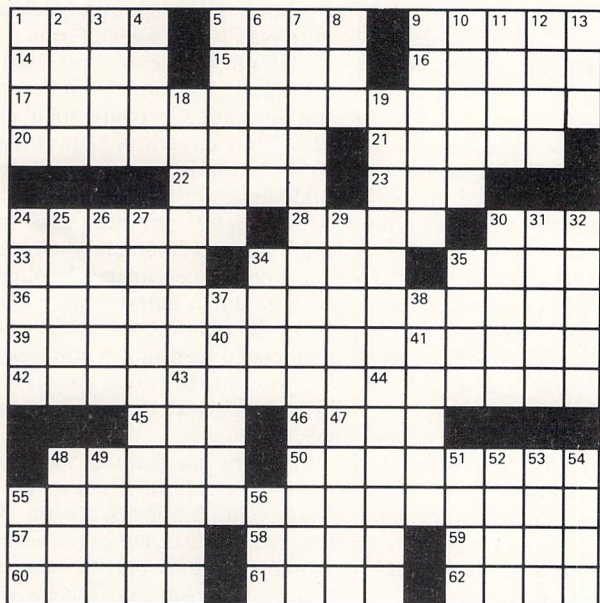
- 1 Expressways: Abbr
- 5 Engagement
- 9 Marry in haste
- 14 Ending for sting
- 15 Classic conflict
- 16 Suit feature
- 17 Flemish master
- 20 Good learner
- 21 \_\_\_ bracelet
- 22 "\_\_\_ clock scholar"
- 23 Salt, in St. Lo
- 24 Kind of balloon
- 28 Customer
- 30 Org. for pros
- 33 Use
- 34 "\_\_\_ true what they..."
- 35 Steinbeck hero
- 36 U.S. abstract expressionist
- 39 Biblical patriarch
- 40 \_\_\_ breve
- 41 Halloween treat
- 42 Study
- 43 Vicinity
- 44 Salad item
- 45 Onassis
- 46 Calif. campus

## Crossword Puzzle

Edited for Grolier by Eugene Maleska,  
Editor, The New York Times Crossword Puzzles.

## DOWN

- 1 Bark cloth
- 2 \_\_\_ school
- 3 Etta of the comics
- 4 Ooze
- 5 Smartly dressed
- 6 Once more
- 7 French painter: 19th c
- 8 Join the Army: Abbr
- 9 One on the lam
- 10 Tag or sticker
- 11 Frank
- 12 Confined
- 13 City transits, for short
- 18 Reddish, metallic element
- 19 \_\_\_ the occasion (perform well)
- 24 Turned to the near side
- 25 Sheeplike
- 26 Claw
- 27 Has infirmities
- 29 Japanese deer
- 30 Start of an Austen title
- 31 Hopeless one
- 32 In a pique
- 34 Unemployed
- 35 Indigo
- 37 Part of U.S.M.C.
- 38 Vast amounts
- 43 In the area
- 44 Contract part
- 45 As well as, to Ovid
- 47 Sing like Bing
- 48 Protected
- 49 "Room to swing \_\_\_"
- 51 Non-com
- 52 Trepidation
- 53 Roof area
- 54 Regrets
- 55 Bread spread
- 56 Mrs., in Avila



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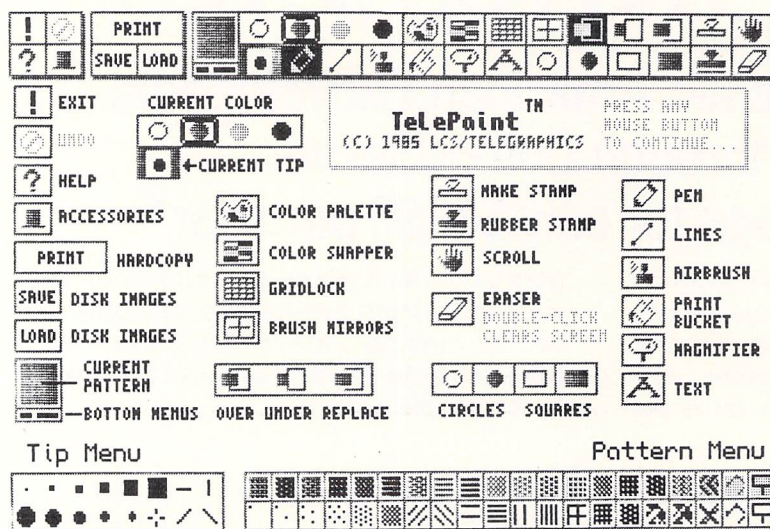
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## TelePaint 2.0

### An Icon-Driven IBM PC Graphics Package

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617/547-4738

**Computers:** IBM PC and compatibles, including ATT 6300, Columbia, Compaq Plus, ITT xtra, Leading Edge, Tandy 1000.

**Operating Systems:** PC-DOS and MS-DOS, versions 2.0 and higher.

**Media:** Requires one double-sided, double-density disk drive.

**Copy Protection:** None.

**Required Peripherals:** IBM Color Graphics Board or equivalent; color monitor; Microsoft, Summagraphics or Mouse Systems mouse.

**Other Requirements:** 256K RAM; mouse driver software.

**Optional Items:** Black-and-white or color graphics printer.

**System used for test:** 256K PCjr with Tecmar JrCaptain board; Microsoft Mouse; Princeton Graphics HX-12 monitor.

**List Price:** \$149

*Reviewed by Lindsay Van Gelder*

When Apple's Macintosh brought icons, mice and pull-down menus into the personal computer world, plenty of IBM PC owners developed bad cases of what might be called MacPaint Envy. Numerous software packages such as PC Paint, PC Paintbrush, Art Studio, IBM Drawing Assistant and ColorPaint have rushed into the breach. While none can hope to match the fine detail made possible by the Macintosh's high resolu-

tion black-and-white monitor, they all offer the IBM PC owner the opportunity to do what Macintosh owners cannot: paint in a rainbow of colors. TelePaint costs more than most of its competitors and thus sets up higher expectations. Usually the program rises to its own challenge, despite some minor bugs and flaws.

TelePaint's best feature is its documentation. Its 50-page booklet is written in clear, unambiguous English. The booklet also is visually pleasing, as befits a graphics program; it contains plenty of illustrations plus boldfaced headlines that make it easy to find desired information. There's also a help screen, accessed by moving the mouse-pointer to a question-mark icon.

The program uses the familiar MacPaint system: (1) move the mouse to the box representing the desired function, such as color or pattern (2) click and (3) go. At the bottom of the screen-canvas are 16 "pen tips" of various shapes and sizes and 40 design patterns, such as dots, plaid, even a mini-brick wall. At the top are a score of icons (more than most similar programs offer) for drawing freehand, drawing straight lines, filling enclosed areas, spray painting, erasing and otherwise designing images. Special boxes tell what color, pattern and pen point are in use at any given time.

A special "scroll" icon can be used to design a full 8½- by 11-inch canvas that's twice as large as the screen. A "rubber stamp" icon allows designing and storing customized pen tips and patterns. A "magnifying glass" icon enlarges and focuses on a small portion of a drawing. The program can access four of a PC's 16 colors at a time using the "pal-

ette" icon. Users can rotate an image, draw multiple images with the "brush mirror" option, change color choice and repaint in midstream, place an image over or under another. An "undo" key erases the most recent work. These and other icon choices are a snap to use, but one function missing from TelePaint is an icon akin to the Macintosh "lasso" for roping and moving part of an image to another part of the screen.

TelePaint's worst feature is its "text" icon, represented by the letter "A." Theoretically, entering text involves moving the mouse to the icon, dragging down a menu featuring numerous typeface fonts (such as bold and sans serif), selecting one font, taking your hand off the mouse without moving it, and typing the text at the keyboard. While some fonts worked fine, others were temperamental and repeatedly bounced back to the operating system level, with any creation in progress gone with the wind.

The TelePaint disk comes with a map of the United States, a pie chart and plenty of other prefabricated images that can be included in any drawing. Any drawn image can be printed, and the program supports various models of IBM, Epson, Data Products, Texas Instruments, Hermes, Canon, Mannesmann-Tally and Panasonic printers. In the absence of a color printer, the program translates the image into black and white plus two shades of gray.

TelePaint isn't copy protected. One program, "Savegraf," can be copied onto any other software such as Lotus 1-2-3. Thus screens of Lotus material can be saved and later transferred to TelePaint for dressing up. Unfortunately, the "Savegraf" program is picky and won't work without a medium-resolution four-color screen image. In other words, users having a monochrome monitor at home and wanting to capture words or numbers to feed into a color-equipped computer at the office are out of luck. Still, the transfer option is a good one to have.

TelePaint has features that are useful in a business setting, yet its ease of use makes it good home software. The resident teen-ager in my household was batting out exotic party invitations within an hour. If you can't have a Macintosh inside your PC, TelePaint might be the next best thing.

*Lindsay Van Gelder has written about IBM PCs and other computers for PC, PC World, PCjr and other publications. Her CompuServe User ID number is 73125,470.*

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# Super Disk<sup>TM</sup> Diskettes

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5 1/4" DSQD Soft Sector (96 TPI)	6501-CA	0.99
5 1/4" Same as above, but bulk pack w/o envelope	6507-CA	0.84
5 1/4" DSHD for IBM PC/AT - bulk pack	6667-CA	2.07
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SSDD = Single Sided Single Density; SSDD = Single Sided Double Density; DSDD = Double Sided Double Density; DSQD = Double Sided Quad Density; DSHD = Double Sided High Density; TPI = Tracks per inch.

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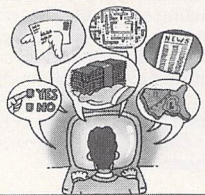


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## VIDEOTEX/ TELETEXT

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### Videotex/Teletext: Principles and Practices

By Antone F. Alber  
McGraw-Hill, 1985  
498 pages, \$32.95 (hardcover)  
Reviewed by John Edwards

Have you ever wondered how videotex services like CompuServe, The Source and Dow Jones operate? What sort of technology allows us to scan through the pages of news, sports, gossip and other data? Furthermore, have you ever wondered how these services are changing our lives, from the way we meet friends to the way we shop? Most important, have you ever wondered if you could make money by operating your own online service or by providing information to an existing database?

To many of us, online services appear to operate as if by magic. You type "GO OLT" and read the latest computer news; type "GO EASY" and you can send an electronic letter to a friend. But, as Antone F. Alber, the author of *Videotex/Teletext: Principles and Practices*, tells us in his book, it takes a lot of complex computer equipment, sophisticated programming techniques and tireless data-entering efforts to provide the services that CompuServe and other online operations offer.

For example, I have a friend who provides The Source with the MusicSource record-shopping service. From a tiny, three room apartment in a suburb of New York City — hardly the environment most MusicSource customers envision when they access the service — he inputs endless lists of record album titles, fills orders and copes with The Source's ever-changing online environment. In a home that's littered with streams of printouts, he is always looking for ways to streamline his operation and provide better services to his customers.

My friend is just one of today's new "infopreneurs" — a small operator with big dreams. He does his job well, but also hopes to expand his business into something more substantial. And he certainly would appreciate this book.

In *Videotex/Teletext: Principles and Practices*, Alber provides a detailed

overview of today's electronic information services for the budding information service operator or information provider. He offers comprehensive rundowns on such varied topics as the creation of text and graphics pages, approaches to selling online services, costs of operating a videotex/teletext service, ways of boosting online revenues and selection of database information. The sections on the components of an interactive videotex system emphasize the information provider's role, the transmission network, the necessary computer gear and subscriber equipment requirements.

Alber also covers the social aspects of online services. He tackles such timely and controversial issues as government controls, privacy, system security, online services' obligation to visually and hearing-impaired users, and videotex/teletext's sociological and eco-

logical impacts. Alber takes a reasoned and impartial approach to all of these topics, encouraging his readers to ponder these problems and to form their own opinions.

As the "info-revolution" continues to gain momentum, we can expect to see many more books on videotex/teletext roll off of publishers' presses. With such major U.S. corporations as AT&T, IBM, Sears, CBS, Dow Jones and Honeywell climbing aboard the online bandwagon, the incentive for publishers to produce such texts will be overwhelming. But those future books will have to be exceptional works if they intend to outdo *Videotex/Teletext: Principles and Practices*. This book sets the standard for the industry.

*John Edwards' latest book is Law Office Guide to Small Computers, published by Shepard's/McGraw-Hill. His CompuServe User ID number is 70007,412.*

### McGraw-Hill Personal Computer Programming Encyclopedia

Edited by William J. Birnes  
McGraw-Hill, 1985  
696 pages, \$80 (hardcover)  
Reviewed by James Moran

The home libraries of many computer enthusiasts contain a smattering of books about BASIC, a few user manuals, and perhaps a book or two on graphics. More advanced users probably have a few books on C or Pascal. Of course real hackers have some of the more esoteric books of the computer genre — logic manuals for operating systems. It was only a matter of time before a smart publisher published a book with comprehensive — and comprehensible — explanations of all of these subjects.

*The McGraw-Hill Personal Computer Programming Encyclopedia* is a large format book (9- by 11-inches). Although subtitled "Languages and Operating Systems," the book is not that narrowly focused. A large amount of introductory, background material is included as a prelude to the language and operating system sections. In these sections readers will find articles that explain how computer programs are designed and why some languages are more appropriate for certain applications than others.

A number of specialists contributed to the book, and that natural diversity

helps to keep the subjects interesting. Strictly speaking, the book is not an encyclopedia but rather a collection of treatises on languages and systems. Other more comprehensive "encyclopedias" have been published about computers, but none has had such comprehensible writing as is in this book.

The book is organized, as one would expect, alphabetically. When a subject, such as a particular language, is explained, there are excellent examples of use as well as a full listing of all the verbs used in the language. Where appropriate, as when pinouts on a microprocessor chip are being discussed, illustrations are utilized to clarify explanations.

Although the languages in this book are more thoroughly explained by technical manuals, there is still a definite place for a book of this type in personal libraries. Many computer books are either too simplistic or too advanced to supply the kinds of information needed most often by today's users. This book has filled a void for those who are out of the hand-holding stage of computer literacy yet are not advanced enough to understand the complexities of an unknown language or operating system. It is unfortunate that the financial requisites of publishing put the price of the book out of the range of most of its potential audience.

*James Moran is vice president of Programming Service Corp., a Midwestern consulting and research firm.*

## Buyer's Guide to Modems & Communications Software

By Terry C. Silveria, Sanjiva K. Nath and Edward Hogg  
Tab Books, 1985  
184 pages, \$12.95 (softcover)  
Reviewed by Harry Green

Before reading this book, I never had given much thought to whether a book is an appropriate vehicle for a buyer's guide. Now that I've reviewed *The Buyer's Guide to Modems & Communications Software*, I'm persuaded that it is not.

When it comes to transmitting rapidly changing information, books require too much lead time. Usually, it is at least a year from the time the authors begin to write until the book reaches distribution channels; often it is more. Obviously, in that time, so much has changed that the information may be unreliable.

An excellent case in point with this guide is the subject of 2400 bps dial-up modems following the V.22 bis standard of the Consultative Committee on International Telephone and Telegraph (CCITT). One magazine article published in early 1985 stated that there were at least 13 such modems on the market; by now there are undoubtedly more. Many observers believe that 2400 bps modems will reach the popularity now enjoyed by 1200 bps. Although it carries a 1985 publishing date, *The Guide* does not describe the V.22 bis standard and mentions only two 2400 bps modems. Of these, only one is used for dial-up operation.

*The Guide* is not without redeeming qualities despite the omission of the most important recent development in

modem technology. It contains considerable information about 300 bps and 1200 bps modems and many popular telecommunications programs. It also contains seven introductory chapters that describe personal computer communications applications, a brief explanation of how data communications work, and some considerations in selecting modems and software. The treatment of these subjects is superficial, however. If you understand how data communications works, you will not need these 35 pages. If you do not understand it, another book will be needed to help you through some of the rough spots that accompany most initial attempts at computer communications.

The essence of the book is the buyer's guide of modems and software. Most of the popular 300 and 1200 bps modems are described. Most of the popular software packages are also described; however, PC Talk III is omitted. Although no one knows how many copies of this program are in use, since it is distributed as "freeware," it is certainly one of the top programs on the

*The Buyer's Guide to Modems and Communications Software* contains much useful information.



market and should be covered by a comprehensive guide. Also, not all popular modems are included. For example, the Prentice Popcom and the Quibie 212E are omitted.

*The Guide* is a convenient collection of information to compare features of both modems and communications software. After checking the products with which I am familiar, I concluded that the book represents them fairly and accurately. If you are in the market for time-tested 300 or 1200 bps modems and software, this book contains much useful information.

Harry Green is a free-lance writer from Portland, Ore. He writes about telecommunications, office automation and personal computer-related topics. His CompuServe User ID number is 70007,431.

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## TOOLS FOR THOUGHT

NEXT

It's a \$17.95 introduction into the world of the true hacker, a place few of us will ever get to know first-hand.

## Tools for Thought

By Howard Rheingold  
Simon & Schuster, 1985  
335 pages, \$17.95 (hardcover)  
Reviewed by John Edwards

Do the names Alan Turing, John Von Neuman and Norbert Weiner sound familiar? If they don't, they should, or you're reading the wrong magazine. Turing, Von Neuman and Weiner are just three of the thousands of pioneers who paved the way for today's personal computers.

The people who developed the computer field were a strange lot. Eccentrics, weirdos and kooks are some of the kinder names you can apply to most of them. *Genius* eccentrics, weirdos and kooks to be sure, but strange folks all the same.

Consider, for instance, the story of Lady Ada Lovelace. She was the daughter of Lord Byron and an assistant to inventor Charles Babbage. Babbage had the idea of building an "analytical engine," a digital calculating machine that, in many ways, set the foundation for today's computers.

Babbage was primarily interested in turning his theories into fact, but Ada, a superb mathematician in her own right, had other plans. She hoped that the analytical engine would enable her to win a vast fortune at England's race tracks. The scheme dissolved, however, when Ada died at the age of 36. Babbage, without Ada's help, never did succeed in building a working engine, and both he and Ada were relegated to Victorian obscurity until rediscovered by modern-day computer scientists and historians.

The tragic tale of British computer whiz Alan Turing is equally intriguing. Although largely responsible for cracking the German Enigma code during World War II, Turing was hounded out of government service after bureaucrats discovered he was a homosexual. During the 1950s he was subjected to bi-

zarre government-sanctioned medical experiments and eventually, as a result of his "treatments," committed suicide. Today, Turing is universally recognized as the father of artificial intelligence.

These are the stories of great nonfiction, and author Howard Rheingold hasn't missed that point. Unlike other recent computer histories that dwell on mechanics, Rheingold introduces us to the people behind the equipment. He shows us that it took imaginative, creative and certifiably crazy people to create the computers we have today.

In addition to looking at historical figures, Rheingold also examines the computer community's present-day heavy thinkers. People like Alan Kay, Ted Nelson, Doug Englebart and others who certainly will create the new generations of computers all of us will benefit from in years hence.

It makes for a good mix. Rheingold is an effective storyteller who writes convincingly and entertainingly, whether he's discussing a 19th-century female genius like Ada Lovelace or a 20th-century male computer wizard like Alan Key.

The people Rheingold writes about aren't like most of us. They're stunningly intelligent and more apt to find light entertainment in a textbook of equations than in the pages of the latest steamy novel. But that's the charm of this book. It's a \$17.95 introduction into the world of the true hacker, a place few of us will ever get to know first-hand.

And I enjoyed the trip.

*John Edwards is a free-lance writer living in New York City. His CompuServe User ID number is 70007,412.*

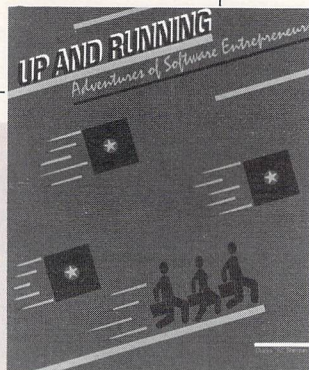
## What's Going On???

If you want to know what's going on around CompuServe, check into the *Electronic Edition of Online Today*. Here you'll find constantly revised news for and about the CompuServe community. GO OLT from any prompt and choose "CompuServe Update" from the main menu.

# ONLINE

T O D A Y  
E L E C T R O N I C E D I T I O N

Up and Running is more than an examination of the companies that have made up the 1980's most exciting industry: it's also a record of the development of ideas preserved in software.



## Up and Running: Adventures of Software Entrepreneurs

By Charles "Ed" Sherman  
Ashton-Tate, 1984  
312 pages, \$15.95 (softcover)  
*Reviewed by Charles Bowen*

Ed Sherman begins his loving portrait of software entrepreneurs with a description of an airplane trip to the Fall 1983 Comdex, a flight filled with soon-to-be participants of the 10-day Las Vegas trade show. The description contains this paragraph:

"Miles below the plane an anonymous city slid by, another vast landscape of crackerboxes and cubical skyscrapers that could stimulate nothing but concern. What will represent our age to the future? What is this culture leaving that compares with the great buildings, sculptures, and artwork of the past? The buzz of excitement on the airplane answered: ideas, that's what — great structures of thought."

That paragraph serves well as a theme for Sherman's book. It is more than an examination of the companies that have made up the 1980s' most exciting industry; it is also a record of the development of ideas preserved in software.

Of course, you shouldn't isolate thoughts from the people who had them — and that's particularly true with the dreams of giants. Sherman talks with Bill Gates about creating Microsoft out of the midnight bull sessions at Harvard, and with Gary Kildall about how his ideas spawned the CP/M community. There are portrait/interviews with those who created Ashton-Tate (no surprise there, since A-T publishes the book) and with Mitch Kapor of Lotus Development Corp.

He also gives special attention to some of the smaller companies that have made big contributions.

Probably my favorite section is a chapter called "Freeware, Cheapware, and User-Supported Software," a glowing report on some

users/programmers' answers to the high cost of commercial programs.

In it, Sherman interviews the late Andrew Fluegelman, who coined the word "Freeware" in 1982 in connection with his classic PC Talk program. He also talks with Jim Button, who has carried on the concept with his PC File database program.

If I have any feeling of letdown from this book, it is that Sherman lets his subjects dominate — the last two-thirds of the work is taken over by a question-and-answer format. I can't justify complaints with that — it's a great way to

pack a lot of information into a small space — but I miss the clear, entertaining narrative style with which Sherman opened the first chapters.

Still, that's a minor criticism. I suppose it is really to Sherman's credit that he's willing to step aside to let his interviewees tell their own stories. It is a tribute to his writing style that we miss him when he turns the podium over to a new speaker.

*Up and Running* is a welcome addition to the growing shelf of portraits of these most exciting years.

# 2400 baud

## U.S. Robotics Courier 2400 Modem

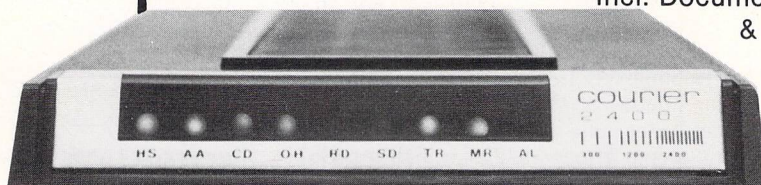
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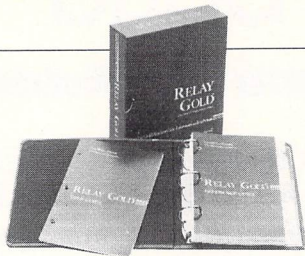
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## Go for the Gold

Relay Gold from VM Personal Computing Inc. is a communications software package for the IBM PC, compatibles, Data General/One and the Wang PC.

The program links micros to each other as well as to minis and mainframes. Features include multitasking, a new generation script language, full menu or command-driven operation, flexible screen scrollback, a learning mode and a tutorial diskette. Retail price is \$225.

For information, contact VM Personal Computing Inc., 6 Germantown Rd., Danbury, CT 06810; 203/798-6755.

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## Electronic Envelope

Electronic Envelope from MCTel Inc. is a utility software that prepares binary files for data transmission over public and private electronic mail systems.

Retailing for \$49.95, Electronic Envelope overcomes incompatibility between computer files and electronic mail systems and also adds confidentiality to electronic mail messages. The program is designed for the IBM PC, Apple Macintosh and compatibles.

For information, contact MCTel Inc., 3 Bala Plaza E., Suite 55, Bala Cynwyd, PA 19004; 215/668-0983.

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## Diskette Connection

Diskette Connection from Flagstaff Disk Conversion Equipment is a hardware system used to transfer document files between most word processing systems and the IBM PC, PC-XT, PC-AT or true compatibles.

The package, which retails for \$695, consists of an 8-inch disk drive, cable and a controller card for the PC. Users can read and write most 8-inch, 5¼-inch and 3½-inch diskettes. Conversion of data is fast, with 40 pages transferred per minute.

For information, contact Flagstaff Disk Conversion Equipment, 1805 N. Beaver, Flagstaff, AZ 86001; 800/821-7493, extension 236 or 602/774-5422.

GO EBB or circle 29 on the Reader Service Form.

## Teleterm X

Teleterm X from Telexpress Inc. is an asynchronous communications software package for the Tandy Model 16/6000 Xenix-based systems, selling for \$395.

The software supports a wide variety of modem types and even allows the user to define his or her own modem type. Features include error-free disk-to-disk file transfer and support of XMODEM protocol. Teleterm X also works with most protocol converters to facilitate synchronous communications.

For information, contact Telexpress Inc., P.O. Box 217, Willingboro, NJ 08046; 609/877-4900.

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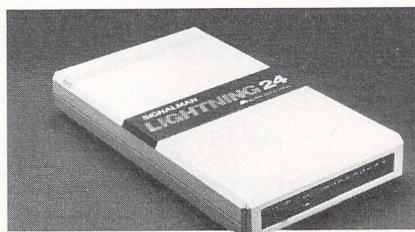
## Modem Protection

Electronic Specialists' Klean Line Security models are now available for standard four-pin telephone modular connectors (RJ-11) and the wider eight-pin connectors (RJ-45).

Intended to suppress damaging telephone line spikes caused by lightning, spherics or phone office switch gear, the Klean Line Security system sells for \$69.95.

For information, contact Electronic Specialists Inc., 171 S. Main St., P.O. Box 389, Natick, MA 01760; 800/225-4876.

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## 2400 Baud Modem

Anchor Automation Inc. has introduced an intelligent 2400 bps data modem with full industry hardware/software compatibility, auto-dial/auto-answer capabilities, low power consumption and three-speed operation for \$599.

Called the Signalman Lightning 24, the modem operates asynchronously at 2400 bps with an automatic equalizer to ensure clear transmission. In addition, the modem features 1200 and 300 bps.

For information, contact Anchor Automation Inc., 6913 Valjean Ave., Van Nuys, CA 91406; 818/997-7758.

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## MacIndex

MacIndex from Boston Software Publishers Inc. is the first automatic index preparation software for the Apple Macintosh.

Priced at \$49.95, MacIndex works with the MacWrite word processing program. It creates an alphabetical index listing of every occurrence of a selected key word or phrase, with the corresponding page number of the occurrence in the MacWrite document.

For information, contact Boston Software Publishers Inc., 1260 Boylston St., Boston, MA 02215; 617/267-4747.

GO EBB or circle 33 on the Reader Service Form.



## 5 Gandalf Modems

Gandalf Data Inc. has introduced five new modems in the Access Series and high speed FasTrak series lines.

Access Series 212 is a full-duplex, asynchronous/synchronous dial modem with auto-dial, auto-logon and auto-answer features, while the Access Series 208 is a synchronous modem that transmits data half-duplex over two-wire dial-up lines or full-duplex over four-wire leased lines at 4800 bps.

The FasTrak 96 and 96FP (fast polling) are both full-duplex, synchronous modems capable of transmitting data at 9600, 7200 or 4800 bps.

The FasTrak 14.4 provides reliable high speed synchronous point-to-point data transmission at up to 14,400 bps over Series 3002 unconditioned or equivalent lines.

Prices range from \$545 to \$3,950. For information, contact Gandalf Data Inc., 1020 S. Noel, Wheeling, IL 60090; 312/541-6060.

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## Sakata Monitor

The lightweight, high-resolution, monochrome amber monitor by Sakata (Model SA-1500) is 12 inches high and engineered specifically for the IBM PC and compatibles.

The monitor is portable and features a non-glare faceplate with black screen.

For information, contact Sakata U.S.A. Corp., 651 Bonnie Lane, Elk Grove Village, IL 60007; 312/593-3211.

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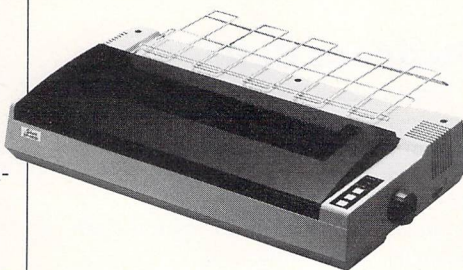
## Mastercom Telecommunications

Mastercom is a telecommunications program from The Software Store that functions as a full-featured smart terminal and file transfer utility for the IBM PCjr and most IBM PC-DOS and CP/M-80 compatible computers.

Retailing for \$49, Mastercom can make your computer a terminal to a host timesharing system as well as capture, send and transfer data files. It supports most communication protocols, including XMODEM, XON/XOFF, line at a time and no protocol.

For information, contact The Software Store, 706 Chippewa Square, Marquette, MI 49855; 906/228-7622.

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## Sakata Printer

Sakata U.S.A. Corp. has introduced the SP-5500 Professional Printer with the capacity to print up to 136 columns (pica) on spreadsheet-width paper.

Features include 180 cps, near-letter-quality print, graphic capabilities and downloadable character sets. It has a built-in parallel Centronics interface with buffer capability of 3K input "star" and 256 user-defined character capability.

For information, contact Sakata U.S.A. Corp., 651 Bonnie Lane, Elk Grove Village, IL 60007; 312/593-3211.

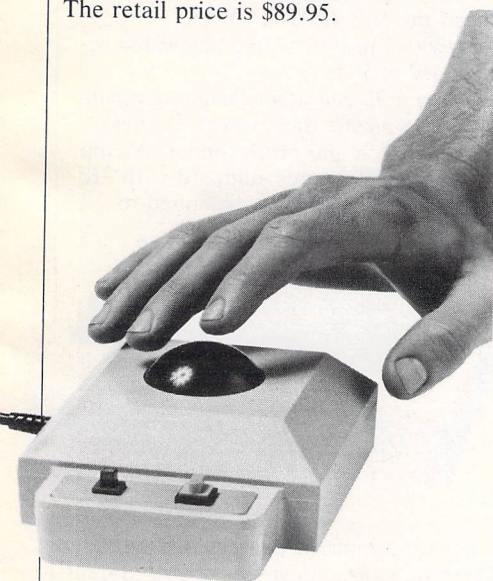
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## Have a McBall

Interfirm Systems Corp. has introduced McBall, a trackball that is directly interchangeable with the Apple mouse.

McBall features a drag button that enables users to "drag" text and graphics without having to hold a button down. It can be used on either side of the keyboard or held in the user's hand. McBall is plug-in ready for the Macintosh, Lisa and IIc.

Operation with the II/II Plus/IIe requires an Apple mouse interface card. The retail price is \$89.95.



For information, contact Interfirm Systems Corp., 110 Pioneer Way, Building H, Mountain View, CA 94041; 415/964-4464.

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## Macintosh Cataloger

Mainstay has introduced Disk Ranger, an automatic catalog and label maker for the Apple Macintosh.

Disk Ranger catalogs and labels a user's disk collection in just a few minutes. Both disk volumes and files are cataloged and can be sorted in seconds, either alphabetically or by type or creator. Labels are automatically printed on a strip of more than 50 pin-feed labels, which are included.

For information on Disk Ranger, which sells for \$49.95, contact Mainstay, 28611B Canwood St., Agoura Hills, CA 91301; 818/991-6540.

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## Tryware Programs

Tryware Volume I from Briter Inc. is a 10-disk package of 16 user-supported programs for the IBM PC, PC-XT and compatibles.

The eight major applications include PC-Write word processor, PC-File database manager, PC-Calc spreadsheet, QModem for communications, PC-Disk for file cataloging, CMenu for menu management of DOS commands and program selection, Privacy for file security, and Newkey, the keyboard enhancer and macro generator. In addition, there are three utilities and five games. TryWare Volume I sells for \$79.95.

For information, contact Briter Inc., 1100 E. Hector St., Conshohocken, PA 19428; 215/828-3230.

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## Dial-up Port Expander

TeLeVell Synchronous Solutions has introduced the DPE, a dial-up port expander that expands a mainframe port and a synchronous modem.

To the mainframe computer, the dial-up world now looks like a multidrop leased line, enabling the user to have five dial-in lines, while buying only one local port and modem. Features of the analog DPE include auto-answer and auto-disconnect.

For information, contact TeLeVell Synchronous Solutions, 1901 Embarcadero Rd., Suite 104, Palo Alto, CA 94303; 415/493-5465.

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## RunIT Interface

RunIT from Martin Marietta Data Systems is a DOS shell program that provides a uniform interface to all PC routines. Priced at \$100, it simplifies program selection, use of DOS utilities and mainframe logon. Especially designed for managerial and first-time PC users, RunIT includes pop-up menus for

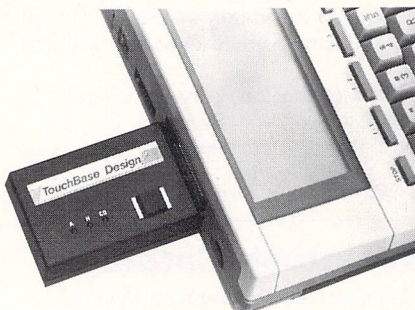
## Business Builder

BPI Systems has introduced BPI Business Builder, an integrated software system that provides micro users with four accounting and four management tools for \$795.

Functions include information management, word processing, spreadsheets and business graphics, general ledger, accounts receivable and payable, and payroll ledgers. Business Builder operates on the IBM PC and compatibles.

For information, contact BPI Business Systems, 3001 Bee Cave Rd., Austin, TX 78746; 512/328-5400.

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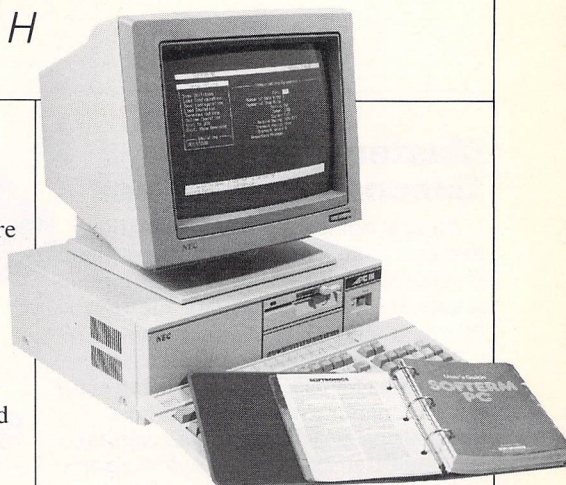
## Portable Smart Modem

TouchBase Designs has introduced TravelComm 1200, a portable, battery-powered 300/1200 baud smart modem designed for Radio Shack, NEC and Epson lap computers.

TravelComm is about the size of a cigarette package. Features include tone dialing, auto-power back-up and auto-baud selection. A standard RS-232 connector is provided to interface to the computer, or the modem may be plugged directly into the computer's RS-232 port. No special programming is required, and no switches must be set. TravelComm retails for \$249.

For information, contact TouchBase Design, 1447 S. Crest Dr., Los Angeles, CA 90035; 213/277-1208.

GO EBB or circle 44 on the Reader Service Form.



## NEC Communications

Softerm PC from Softronics Inc. is now available for the NEC Advanced Personal Computer III.

With Softerm PC, users can communicate with virtually any mainframe or minicomputer. With more than 30 complete terminal emulations in a single program, as well as extensive file transfer and utility functions, Softerm PC is adaptable to any synchronous communications or terminal emulation requirement. The program sells for \$195.

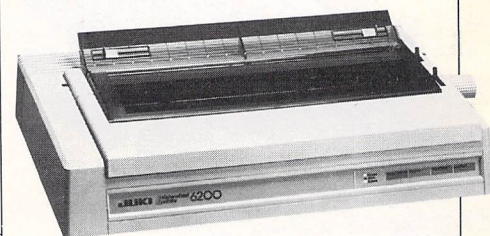
For information, contact Softronics Inc., 3639 New Getwell Rd., Suite 10, Memphis, TN 38118; 901/683-6850.

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## Daisywheel Printer

Juki Office Machine Corp. has introduced the Juki 6200, a 30 cps daisywheel printer with a suggested retail price of \$745.

Using a 96-character Diablo compatible mono-plastic daisywheel, it offers 10/12/15 pitch and proportional spacing. The Juki 6200 comes standard with 3K memory, which can be expanded to 15K.



For information, contact Juki Office Machine Corp., East Coast: 299 Market St., Saddle Brook, NJ 07662; 800/932-0590. West Coast: 23844 Hawthorne Blvd., Suite 101, Torrance, CA 90505; 800/325-6134 (nationwide) or 800/435-6315 (California).

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Listings are classified in four categories: Software, Services, Consultants and Retailers. As each listing is received, it will be published in the next available issue of *Online Today*.

Each listing costs \$85. This covers the general listing information as well as a 40-word description of the product or service. Additional words are \$15 for up to 15 words. Listings that run for three or more consecutive issues earn a 10 percent discount. Payment *must* be received with listing information.

The following is a guide to the type of information to include in a listing:

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### Consultants:

Company and individual contact name; mailing address; telephone number; CompuServe User ID number; up to 40 words describing your products and services.

### Retailers:

Company name; individual contact name; mailing address; telephone number; CompuServe User ID number; up to 40 words describing your products and services.

You may use the enclosed card when ordering your ad or mail your information with payment to *Online Today Shopper's Guide*, P.O. Box 639, Columbus, Ohio 43216-0639.

## SOFTWARE

### APPLE II+/IIe/IIc SOFTWARE

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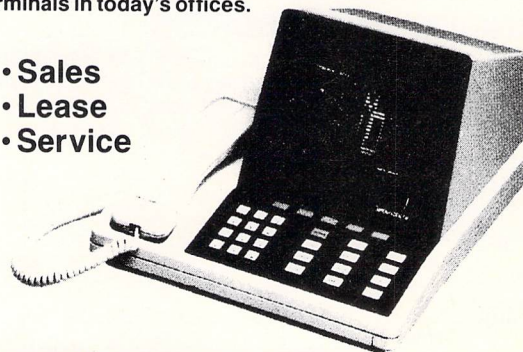


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3	Landmark Contracts	6	30	Telexpress	58
4	Travelshopper	11	31	Electronic Specialists	58
5	Hallmark's You Guessed It	19	32	Anchor Automation	58
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8	PaperChase	25	35	Sakata U.S.A. Corp.	58
9	Heathkit	27	36	The Software Store	59
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23	Peterson's Guides	55	49	Official Airline Guide	Cover 3
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25	Langley-St. Clair	56			
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February issue, not valid after May 1986.

## Understanding Artistry

A while back I came to the conclusion that I'm not a programmer. Thirty-seven years ago, when the Lord was compiling data for this boy child, he didn't even consider giving him the capacity to manipulate stack pointers or poll serial ports.

However, I've become a fan of artistic programming — an acquired taste, like a love of opera or bluegrass.

Now I haven't always been a computing connoisseur. In fact, it was the online community that broadened my understanding of it through a series of experiences that also taught me something about the enormous potential of our medium for improving human relations.

And there hangs a tale . . .

When I bought my first computer six years ago, I thought of programming as little more than the digital gasoline that made it run. To defend the tangled code I wrote, I adopted a cavalier attitude, complete with battle cry — "Any crash you can walk away from is a safe landing . . ."

It was only after I started programming with an old friend who was quite good at it that I started getting the sneaking suspicion that there was something lacking in my approach.

"We're going to have to rewrite this whole section of code," he'd say, X-ing through several dozen lines of the program I'd sweated over.

"Why?" I'd say, more than a little miffed. "It works."

"Yeah," he'd say, looking a little like someone smelling something foul, "but it's . . . it's not elegant."

That certainly offered to add a new dimension to my criteria for programs — for me, they either ran or they crashed. At first I thought he was just being obstinate. After all, he'd come up through the disciplines of math and science and could be excused if he felt a certain territorial imperative. In fact, I'd have been disappointed if he hadn't wanted to defend the turf against us encroaching muddle-headed liberal arts disciples.

But after a while, he started thrashing about for new descriptions for programming. In addition to "elegance," code either had or lacked "finesse," "conciseness," "symmetry."

Suddenly, I was the one feeling encroached upon.

"What do you think this is?" I said in frustration. "A poem or something? Pro-

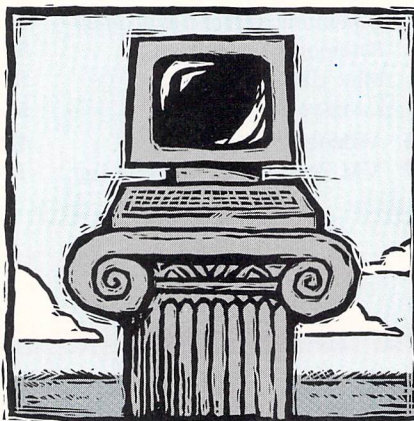
gramming is just like electricity in your house. It either works or it doesn't work. Can there be artistry in wiring?"

It was then he got that annoying "Gotcha!" look in his eyes.

"To a master electrician there can be," he said with a sniff. "Your contrary opinion could explain that rat's nest of wiring in your house."

Grrrrrr . . .

Obviously, this wasn't the kind of thing over which you'd fight a duel, but it did cause no small amount of tension between us when we sat down at a keyboard. I wanted to get the program up and running in any form; he felt that programming in "style" was a noble pursuit in and of itself. Secretly, I wondered if he weren't just paying me back for our high school days when I'd had an annoying habit of correcting his grammar as he talked, just to get his temper up.



It was about that time that I started getting online with my computer, and I found an amazing thing — lo and behold, my friend wasn't alone.

Nightly, as I dropped in to various CompuServe forums with my modem, I overheard online chats between master programmers who were talking about "efficient" programs. The way they talked about the proper use of all the logical tools of programming reminded me of stories of writer J.D. Salinger, who reportedly used to sit around all night arguing about obscure rules of syntax.

In fact, the more I heard these comments from electronic strangers, the more I realized that my friend wasn't being "difficult" at all — he was just on the cutting edge of a new creative movement in computers. As a result, I started looking at it in an entirely different light. Reading over well-executed code, or,

better still, sitting near the keyboard while it was composed, became like watching a composer create something from nothing. I'd learned enough programming to be an informed spectator. I just couldn't produce the digital wonders myself. (To my credit, I guess, I accepted my limitation gracefully. I'd had practice, starting years ago when I realized that, while Miles Davis and I share the same limited number of notes, he creates music that has never been heard before.)

The point of this little confessional is that my online experiences helped me to better understand a "real-life," offline, human situation.

As I think about it, I believe this online medium is being used daily to help smooth over real human disagreements, many of them of greater importance than my little programming tiff. I think it's particularly true among people who have grown too close to communicate effectively.

I mean people like my friend and me who have known each other for more than 20 years. Like members of the same family, we often communicate in sentence fragments, gestures, grunts and allusions to common experiences of more than a decade ago. In other words, while our communication is fast, it's not always clear.

In the end, I was able to understand what he was talking about when I heard the same ideas being bandied about by new online acquaintances — people with whom I had no personal history. It wasn't that they expressed themselves any better than he — it's just that the nature of this electronic medium required them to spell out what they were feeling, without the shorthand that he and I had created. It also verified that we weren't alone in our differences.

It seems to me that as this electronic medium grows, we'll see it used increasingly to help resolve the offline differences, great and small, between friends and loved ones — parents and children, husbands and wives, teachers and students. There's a wonderful potential here in helping mediate when we're not communicating as well as we *think* we are.

Now, wouldn't it be interesting if, for all this talk of instant communications, our medium's most important product turned out to be old-fashioned understanding?

*Charles Bowen is a contributing editor of Online Today. His CompuServe User ID number is 70007,411.*

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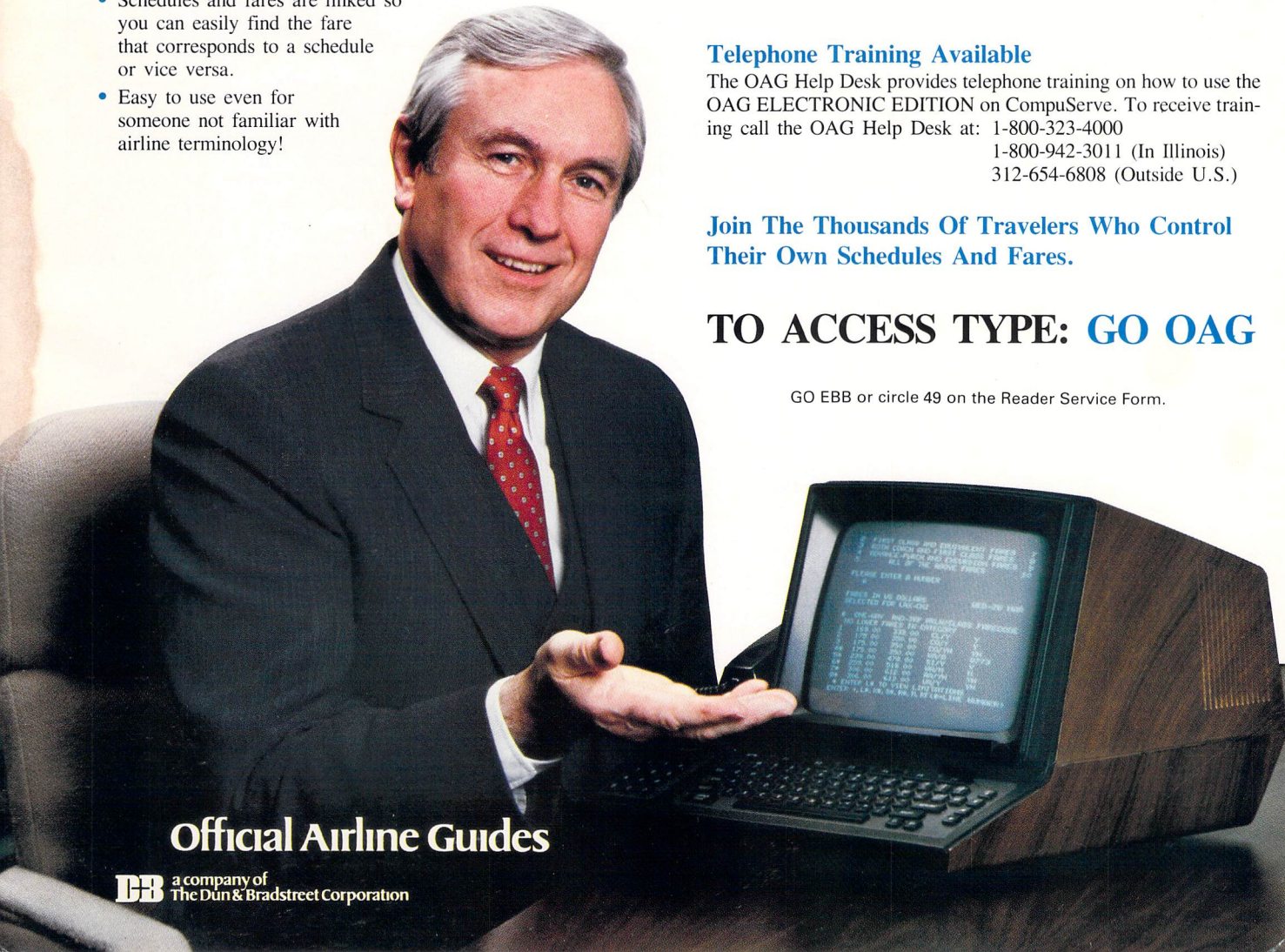
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